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THE LARYNGOSCOPE

A MONTHLY JOURNAL DEVOTED TO DISEASES OF THE NOSE - THROAT - EAR

FOR CONTENTS SEE NEXT PAGE.

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THE

LARYNGOSCOPE.

VOL. V. ST. LOUIS, MO., DECEMBER, 1898. No. 6.

ORIGINAL COMMUNICATIONS.

(Original communications are received with the understanding that they are contributed exclusively to THE LARYNGOSCOPE.)

SPEECH MADE AT THE UNVEILING OF THE WILHELM MEYER MONUMENT, AT COPENHAGEN.

BY SIR FELIX SEMON, M.D.

MR. MAYOR, LADIES AND GENTLEMEN—The Executive Committee of the Wilhelm Meyer Memorial have delegated to me the signal honor to hand over the monument, erected by international subscriptions in his honor, to the care of the Copenhagen municipality. In fulfilling this pleasing task I much regret my inability to address you in the Danish tongue, and for this reason alone I must not trespass long upon your patience. At the same time, this occasion is such a very unusual one that I may be permitted to say a few words pointing out its meaning and importance.

We are assembled here to-day to unveil a monument erected in honor of the late Dr. Hans Wilhelm Meyer. A monument in honor of a physician—that in itself is a very uncommon thing. To be immortalized by the sculptor's art in brass or marble in a public place has usually been reserved, from times of old, to some few classes of the community only. Great rulers, benevolent or warrior princes, distinguished statesmen, victorious generals and admirals—these are the privileged mortals in honor of whom most frequently monuments have been erected; more rarely has such a reward

fallen to the lot of great artists, poets, painters, musicians, sculptors; still less frequently have men of science, philosophers, law-givers, inventors, and other leaders of intellect thus been distinguished; few and far between are monuments erected in honor of members of the medical profession. Nor is the reason of this far to seek. Slowly and by the labor of many is the edifice of scientific medicine being erected. The brain work of a lifetime of a physician usually means hardly a single brick in this ever-growing structure. Even if of uncommon importance, his achievements rarely pass outside a comparatively narrow circle within his own profession; not often is his fame of a really universal character amongst his own compeers; still less frequently does it appeal to the imagination, to the gratitude of the community at large. Thus the ordinary fate of the scientific physician, even if in his day he has been successful in promoting, by teaching and writing, the welfare of mankind, as a rule is not of a largely resplendent character. A few complimentary obituary notices, the grateful recollection of some friends and pupils, not as a rule lasting longer than into the immediate following generation, finally a resting place for his name in those corners of medical literature in the development of which he had been most active—this is the summary of the life-work of most leaders of the medical profession.

What, then, has been the conspicuous merit of Hans Wilhelm Meyer that he should have been singled out for so unusual an honor as the one which is going to be paid to his memory to-day? The answer is easily given. It is now just thirty years since he was one day consulted by a girl, aged twenty, who suffered from deafness, whose voice was most peculiar, and the expression of whose face was almost idiotic. Treatment directed to the ears and to the throat failed, and it was not until the puzzled observer one day introduced his finger into the space between the nose and throat that an unexpected solution was met with. Instead of penetrating into an open cavity, the finger was arrested by a large, soft, easily bleeding mass, a condition the existence and nature of which in those days formed a *terra incognita*. Meyer succeeded in removing this mass by operation, with the result that the deafness was materially improved, the voice became natural, and the idiotic expression of the face disappeared. Gratifying as this result was in itself, it was, however, only then that Meyer's real merit commenced. Schopenhauer has truly said that not he is finder of a thing who lifts it from the ground and drops it again, but he who, recognizing its value, takes it up and keeps it.

If Meyer had regarded his experience in the light of a mere pathological curiosity, again years and years might have passed before the importance of the subject was realized. But with the true instinct of the scientific observer who develops what is ultimately to become an important truth from small beginnings, Meyer did not drop the clue which a casual observation had placed in his hands. He began studying the subject in all its bearings; he examined the masses he had removed with regard to their structure; he investigated the results which obstruction of the space between the nose and throat exercised upon hearing, articulation, facial expression, general, mental and bodily development; he examined 2,000 Copenhagen school children with regard to the frequency of this affection; he made himself the apostle of his own teaching by proclaiming it not only in his own country, but also in scientific publications abroad. In one word, to such an extent did he realize the true significance of his discovery that he left to his successors merely the addition of more or less important details, whilst the foundation of the edifice erected by him has remained unchanged from the time of his own first publication on the subject.

Nevertheless it cannot be said that this teaching at first made very rapid headway. When in 1881 he introduced a discussion on the subject at the International Medical Congress of London it came almost—I well remember—as a novelty to many of his audience, although that was mainly composed of specialists, and it was only in the next decade that the true importance of the subject was realized throughout the world. It was at first not easy to convince the bulk of the medical profession, the parents of the mostly juvenile patients, and the schoolmasters, that a discovery had been made which, like few others in medicine, was of the utmost practical importance concerning the development of a healthy mind in a healthy body of the rising generation, and it needed the irrefutable proof of the surprising improvement seen in the subjects of successful operations to make this conviction a universal one. But truth, though slowly, ever forces its onward way, and when Meyer three years ago closed his eyes he had the satisfaction of knowing that the value of his discovery had at last been universally recognized. Already then the number of those who, through the timely removal of the obstructing glands, had been saved from lifelong deafness or from the lasting results of obstructed nasal respiration amounted to many thousands, and the benefits achieved through Meyer's merits will continue to accrue in future times to hundreds of thousands and to millions.

The proposition made immediately after his death to erect a statue to him at Copenhagen under these circumstances met with the most sympathetic reception; committees were formed in almost every country in which scientific medicine is established; physicians, surgeons, specialists, general practitioners, grateful patients, former patients, showed themselves anxious to contribute their mite towards a truly international monument of gratitude of his contemporaries towards the deceased great benefactor of the human race, and the result we see to-day before us in the shape of this beautiful and touching monument, which will carry the names of the artists, Messrs. Bissen and Runeberg, to every quarter of the globe.

It is true that in the general chorus of approbation a few dissentient voices have been heard. "What after all," it has been said, "has been Meyer's extraordinary merit? He put his finger up behind a patient's palate and found an obstruction which he removed, and which turned out to occur more frequently than could at first have been supposed." Very true, but need I remind my audience that the same specious argument had been used against the claims of Christopher Columbus? America had been there all the time, only waiting, as it were, for the bold sailor who dared to go westward until he struck a new continent. But Columbus did it! The naso-pharyngeal cavity had been there waiting for its explorer ever since man in his present shape has been in existence; pathological obstruction of this cavity has been as old as the records of the sculptor's art allow us to go back. In the last paper on the subject, which Meyer wrote a few months before his death, he showed that the facial expression of some Greek statues and busts which have come down to our times left no doubt that the originals had been suffering from "adenoid vegetations;" mediæval portraits of historical personages prove the same fact. Any physician might have conceived the idea of investigating the subject as Meyer did in 1868, but it was left to Meyer to do it, and having done so to realize the importance of his discovery, whereby he became, without exaggeration, a true benefactor of the human race. That is why we are assembled here to-day, that is why we do honor to his memory.

Gentlemen, the country of Denmark has been rich in producing men of eminence in almost all branches of human activity. If in many instances the nature of their distinction is better known to their own compatriots than to the world at large, this is but natural, and is an experience which is repeated in every country under the

sun. There are some Danes, however, whose names are household words throughout the civilized world, whose reputation is not a local but a universal one, and who, whilst their countrymen may be justly proud of them, belong, as it were, to mankind at large. Need I mention the names of Tycho Brahe, of Bertel Thorwaldsen, of Hans Christian Oersted, of Hans Christian Andersen, of Niels Gade? To those great names I think may be reverently added the name of Hans Wilhelm Meyer, one of the greatest benefactors to mankind medicine has known.

Mr. Mayor, in the name of the subscribers to this monument, who have gladly contributed towards this external sign of gratitude erected in memory of your great compatriot, I have the honor to deliver the monument of Hans Wilhelm Meyer to the safe keeping of the municipality of Copenhagen.

October 25, 1898.

To Commemorate O'Dwyer's Name.

At the meeting of the Section on Diseases of Children, of the American Medical Association, held at Denver, Colo., June 7–10, 1898, it was moved and carried unanimously that "A Memorial Committee" be appointed to commemorate the late Joseph O'Dwyer, with suitable powers, etc., to collect such moneys, and to act with other bodies for the same purpose. The committee is composed of the following: Dr. Louis Fischer, New York City; Chairman, Dr. J. P. Crozier Griffith, Philadelphia, Pa., and Dr. F. E. Waxham, Denver, Colo.

VERTIGO; ESPECIALLY AS RELATED TO NASAL DISEASES.*

BY OTTO J. STEIN, M.D., CHICAGO.

Professor of Diseases of the Nose and Throat at the Post-Graduate Medical School and Hospital.

The discussion of the subject under consideration, if it is to be of an impartial nature, and at the same time, with the aim of presenting the matter in as true a light as our present knowledge will allow, is beset with several difficulties; and it is not the ambitious aim of my paper to clear away all the doubts and suspicions that are bound to cling in the minds of some as to the conclusive cause of this form of vertigo; but its aim is to impress upon the mind of the physician the importance of the careful analysis of a single symptom, and the value of recognizing nasal disease as a causative factor in some of the various forms of vertigo.

As it has been a matter of teaching and understanding in the past by many, and especially the aurist, that vertigo was necessarily of aural origin, and in an attempt to bring the matter before you in as comprehensive a sense as possible, I will first cite the history of a case of nasal vertigo.

Mr. F., a tailor, age forty-nine years, was referred to my clinic at the Post-Graduate Medical School, August 1, 1897, for a vertigo that had been troubling him since May of the same year. For three months prior to his being seen by me, he had consulted some of our most able and careful men in the profession, who found various disturbances as the cause of the existing vertigo. For a time he was under treatment for his liver, then for his kidneys, then for his nervous system, but all to no avail. The vertigo continued and increased in spite of the excellent services he had employed. When I first saw the patient he was having from one to three attacks of vertigo a day. At this time there was a distinct tinnitus, but of a very faint and distant buzzing character, which seemed more prominent shortly before the attacks. The severity of the attacks was such that he declared, invariably, on the approach of an attack, he had to reach out for something to grasp in order to prevent himself from falling. On this account he was incapacitated for all work. He recounts having actually fallen but once, and that was while riding a bicycle. A dizziness came over him and he fell from his wheel.

*Read before the Chicago Medical Society, October 12, 1898.

Vomiting and paresis were at no time present. He claims to have never lost consciousness once. He was often dazed, but always knew what transpired. The sensations experienced during the attacks varied. Once he felt as if the ceiling were coming down on him; more often he felt as if he were inverted. There were no distinct sensations of turning in any particular direction, or of falling to one side or the other. Their nature seemed to be more objective than subjective. On account of the repeated occurrence and increase in severity of the attacks, the patient became markedly depressed and alarmed, although he did not seem to be of a particularly neurotic temperament. In this respect his family history was also good. He was not disposed to any illness, and had always been well and strong. In all habits he is very moderate. Otherwise, physically, he presented no appearance that might have made one think there was a more remote cause at work, excepting, perhaps, his color, which is dark and of a somewhat icterus nature. On this account he was referred to Dr. Arthur Edwards for examination, who reported negatively on the case. He was also referred to Dr. Casey Wood's service at the Post-Graduate School on account of his eyes. The examination showed nothing of importance.

On inspection of the nares, one saw a general hypertrophic rhinitis, enormously exaggerated in the condition of the middle turbinal on the right side, pressing against the septum, which was somewhat deflected to the left, causing its anterior end to appear very much swollen and congested. The naso-pharynx was found to be the seat of a severe catarrhal inflammation, kept alive by the pent-up secretions behind the stenosed nasal fossæ. The oro and naso-pharynx were extremely hypersensitive, and made post-rhinoscopy, even under 10 and 20 per cent spray solutions of cocaine, very difficult. The mucous membrane of both nares was also hyperæsthetic. Examination with a probe would, at certain spots, elicit a spasmodic cough, and, at times, a sense of giddiness. To this symptom I direct particular attention.

The hearing with right ear was very good, with no subjective symptoms. The left ear did not perceive the sound of a 60-inch watch further than 12 inches. The drumhead presented a rather flaccid, but, at the same time, slightly retracted, appearance. By aid of the pneumatic speculum this was fully demonstrated. There seemed to be signs of cicatrices present, and by forced inflation a slight hissing sound was detected, although the perforation could not be seen. The left Eustachian tube, as a rule, was difficult of inflation, but it was always possible. Local treatment, with the iodides and bromides internally, for a short time, apparently gave but little relief.

Turbinotomy of the right middle turbinal, and subsequent cauterizations of the inferior turbinal, resulted in a remarkably rapid cessation of the vertigo. The aural catarrh continued the same. The tinnitus, which has been quite severe of late, responds now most readily to the bromides. The hearing is the same; if anything, there is a slight decline. The nares, when last seen, were free from any trouble, and with no sign of the vertigo since the time of operation, about a year ago.

As to the diagnosis in this case, I will say that the absence of concomitant symptoms pointing to organic disease of the central nervous system; functional disease of the nervous system, as reflex epilepsy; cardio-vascular disease; ocular disturbance, or to a toxemia resulting from alcohol, tobacco or decomposition in the gastro-intestinal canal, may be precluded as a probable causative factor. The presence of aural symptoms forces us to consider this disturbance as a possible etiological condition. Vertigo due to aural causes does not differ from vertigo due to many other causes. But the treatment employed in relieving aural vertigo, *i. e.*, iodides, bromides, inflation of the middle ear, etc., had no appreciable effect on the vertigo under consideration, while the operative procedure on the nose, as described, brought about almost immediate relief. Besides, the aural catarrh, as first found, remained and still remains about the same. And, finally, the sense of giddiness produced at times by a painstaking probing on the side of the lesion, should remove any doubt as to the classification of this case of vertigo.

A résumé of the subject of vertigo in general is probably essential to a more comprehensive understanding of the matter in hand. In attempting this we are confronted with several different theories as to its mode of production.

The older theory that the inner ear is the seat of the organ of equilibration, so thoroughly engrafted upon our minds from the long list of experiments carried out upon this organ of hearing, in both humans and animals, from the time of Flourens and Goltz to the present, is the one generally accepted as furnishing convincing evidence as to the cause of this intricate phenomenon. It will be but a reiteration of our physiology to explain the mode in which this condition of vertigo is supposed to occur, but it is essential to freshen our minds a bit upon the method of its occurrence to more fully appreciate the entire subject. Remembering the anatomy of the inner ear as consisting of three parts, the three semi-circular canals, the cochlea and the vestibule, which lies between the two former. A membranous portion filled with a fluid called endolymph is anchored

in a similar fluid called perilymph within these bony parts. These lymph-like fluids are renewed by means of a duct passing from the vestibule to, or in the neighborhood of, an epicerebral lymph-cavity. Its nerve is the auditory; composed, according to Duval and Laborde, of both motor and sensory fibers, and arises both from the floor of the fourth ventricle and the crus cerebelli. It enters the internal auditory meatus in company with the facial nerve, and within divides into vestibular and cochlear branches. The vestibular branches enter the vestibule on its inner wall through several sieve-like openings, distributing its terminal filaments to the ampullæ of the semi-circular canals and to the sacculus and utriculus. The ampullar branches are said to contain the motor fibers. Now, in explanation of the theory promulgated by Goltz and others, that the semi-circular canals are a special organ of sense, serving to maintain the equilibrium of the head, and indirectly the whole body, we are told that an impulse, like that produced by the current flow of the endolymph within its membranous canal, and resulting from every movement of the head and body, is given to the terminal nerves in the vestibule and sent by way of the auditory nerve to the center of equilibrium, residing in the median lobe of the cerebellum, and thus we are told of our position in space. This is known as "sense of equilibrium." If this impulse is increased in any way, causing an irritation, the "sense of equilibrium" becomes disturbed, and we have resulting a condition called vertigo. The symptoms frequently accompanying a vertigo, like nausea, vomiting, pallor, slow breathing, weak pulse, etc., we are told, are due to what is known as the "overflow theory." The excess of nervous energy resulting from the over-irritation is conveyed to the contiguous centers that control the above conditions.

This, then, in substance, is the mode of production of vertigo, as believed in by the disciples of Flourens and Goltz.

Now, we know that direct stimulation of the cerebellum, as from intra-cranial tumors, cerebral hemorrhage, inflammatory products, etc., produces similar disturbances in equilibrium and locomotion as those recited above resulting from an irritation emanating at or about the terminal filaments of the auditory nerve. Just so may like symptoms be produced by an involvement of any part of the auditory nerve from its origin to its endings. And still farther; from a recent report by H. A. Alderton, of Brooklyn, N. Y., in the *Annals of O., R. and L.* (February, 1898, page 14), we learn of a vertigo produced by the simple stimulation of the membrane of the middle ear by means of a cotton-carrying probe. Furthermore, and in

direct opposition to the theory as set forth above, both Politzer and Lucae report cases where there was congenital absence of the semi-circular canals, or where they were filled with blood, and still *no* disturbance of equilibrium or vertigo existed. Steiner and Sewall, in their experiments on the shark, which has an auditory apparatus the same as in humans, found, on removing the semi-circular canals, no disturbances in equilibrium. Similar experiments on frogs and lizards verify this. M. A. Goldstein, of St. Louis, presented before the recent annual meeting of the Western Ophthalmologic and Oto-Laryngologic Association a specimen of exfoliation of the cochlea and semi-circular canals from a negro boy of seven years, who presented no disturbances in equilibrium or co-ordination. Out of nearly 50 cases of necrosis of the labyrinth recorded by Bezold, only 12 showed any symptoms of vertigo.

From these more recent and careful experiments, and from the clinical cases mentioned, one is seemingly justified in questioning the theory as laid down by Flourens and Goltz, that the labyrinth is the seat of the organ of equilibration, and which regulates all our movements in space. That the earlier experiments resulted in the finding of a vertigo after each and every operation upon the inner ear is now attributed to the lack of care exercised in the carrying on of the experiments, and that there was an injury done to the brain, either directly or indirectly, by traction on the auditory nerve. Experiments carefully carried on, with this fact in view, do not admit of the existence of a vertigo as an accompaniment.

The question that the auditory apparatus is a dual organ, and that the function of the one disturbed is maintained by the other, might be brought up as an argument. But this would not explain the cause of the vertigo in cases where it really existed. It would only explain the reason of its absence, but not the reason of its presence.

The reflex theory is the one supported by many as the true explanation of this phenomenon. Under this head it is more easy to explain and understand the various forms of vertigo that constantly come to our notice. But it is not the purport of this paper to discuss vertigo in all its forms, but simply in its relationship to nasal disease. A simple reflex phenomenon consists of an impulse conveyed by a sensory nerve fiber to a central nervous cell or mechanism, and thence it is reflected by a motor fiber to some motor organ. In the nose the trigeminus, or fifth cranial nerve, is the principal sensory nerve involved in this act, supplying, as it does, the anterior part of the septum and inferior turbinals and meatuses. Other sensory nerves in these parts are branches from Meckel's ganglion and from

the vidian, these supplying the superior-posterior part of the septum, and the superior and middle turbinals and meatuses.

John MacKenzie and Sandman have, by extensive experimentation, located certain areas in the nose, which, upon irritation, were peculiarly susceptible in the production of reflexes. They locate these areas at the anterior and posterior ends of the middle and inferior turbinals and the corresponding parts on the septum. Lennox Browne, in discussing the subject of "sensitive areas," says: "References have been made to sensitive areas on inner surface of inferior turbinals, as demonstrated by J. MacKenzie and Häck. This is too narrow a view, to regard this region as the only sensitive one. Sajous describes three other ones; on outer wall of fossæ, in front of middle turbinal, and two on that body—anterior and posterior ends. My own experience points to the fact that on the septum, and especially over spurs and projections caused by deflections, there are 'sensitive areas,' and that the situations thereof vary greatly. Some authors hold that there are separate 'sensitive areas,' corresponding to the acts of lachrymation and sneezing, and in addition to an 'asthma zone' and a 'cough zone.'"

Such is the expression of this authority.

In my opinion the nostrils are not endowed with any special sensitive spots, but where such a condition is manifest there exists a hypersensitive condition due to a morbid state of the nervous supply of that part, and its location may be at almost any place in the nostril. MacKenzie, in his article on "Pathological Nasal Reflex" *(N. Y. Medical Journal, 1887)*, advanced the theory of erectile-tissue engorgement, or hypertrophy, as a condition necessary to the production of the nasal reflex. Burnett, Hofmann, Bosworth, Fränkel, and others, maintain it is not necessary that such a previous condition of the erectile tissue of these specially sensitive areas exist before a reflex is elicited. In their defense they recite cases of atrophic rhinitis in which reflex cough, asthma, etc., existed. Some writers, like Heymann and Rossbach, maintain that a neurotic predisposition is a necessity for the exhibition of a nasal reflex. This probably is the view held by most neurologists. That there is such a thing as nasal reflex cannot be disputed when we have most conclusive evidence of its existence in some physiological conditions, such as the movements of the alæ nasi, the flow of normal secretions on stimulation, sneezing, etc.

Pathologically, we have a host of troubles following nasal irritation, amongst which may be mentioned spasmodic asthma from polypi, tic douloureaux from a nasal spur, head-ache, aphonia, chorea,

salivation, cough, neuralgic pains affecting the arm and shoulder, twitching of facial muscles, functional heart affections, esophageal spasm, Basedow's disease, hay fever, nocturnal incontinence, various sexual disturbances and eye affections, stammering, vertigo, and so forth. Vertigo from nasal irritation has been reported by quite a number of authors. Joal reports nine cases; Häck, four; Fränkel, two; Heryng, three; Schmaltz and Massei also report cases.

As to the exact mode of production there is much speculation and division of opinion. That it is a reflex neurosis, the consensus of opinion will attest to. As to the nature of the neurosis, opinions differ. Of the reflex nasal neuroses, we have to consider the: 1, sensory; 2, motor; 3, secretory; 4, vaso-motor, and 5, trophic varieties.

The sensory, secretory and trophic varieties, I think, might be dismissed without further thought. Our morbid condition, then, resolves itself into motor and vaso-motor. It might be of purely motor form. The irritant is received at the hypersensitive station in the nose, whence the impulse is sent along some branch of the trigeminus, or of Meckel's ganglion, and, by connection with branches of the sympathetic, reaches the vertiginous center, or centers, for some authors are of the opinion that there exists a series of centers that are concerned in the production of vertigo.

More likely it is a combination of both motor and vaso-motor forms. The impulse sent along the afferent trigeminal nerve is reflected along a vaso-motor nerve, producing an alteration in blood pressure in that region of the brain presiding over equilibrium and co-ordination. This alteration in blood pressure, in turn, acts as an irritant to the center, which manifests itself in a disturbance of the function of this part.

Moldenhauer, in considering congestive reflex head-ache, thinks it is due to a disturbance of the circulation at the base of the brain, through the medium of the ethmoidal arteries and veins. Bosworth, drawing deductions from this, thinks that nasal vertigo may be likewise explained. Similar views are held by Joal, Fränkel, Heryng, and others.

The theory that an increase in certain blood elements, as the eosinophiles, which takes place in various conditions that are often attributed to nasal reflex neuroses, has been suggested by some writers as a possible solution of the pathology of reflex neuroses of the nose. Neusser and his pupils, Weiss and Klein, have probably paid more attention to this subject than any one else, and their experiments and findings in this direction are worthy of future consideration.

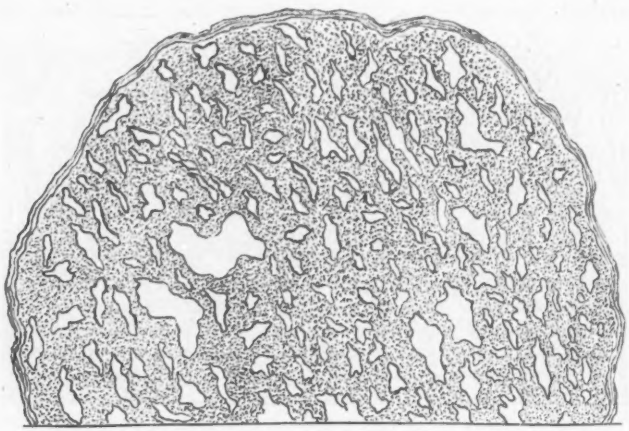
100 State Street.

BLEEDING POLYP OF THE SEPTUM (TELANGIECTOMA); REPORT OF A CASE.

BY GEO. L. RICHARDS, M.D., FALL RIVER, MASS.

Otologist and Laryngologist to the Fall River and Emergency Hospitals.

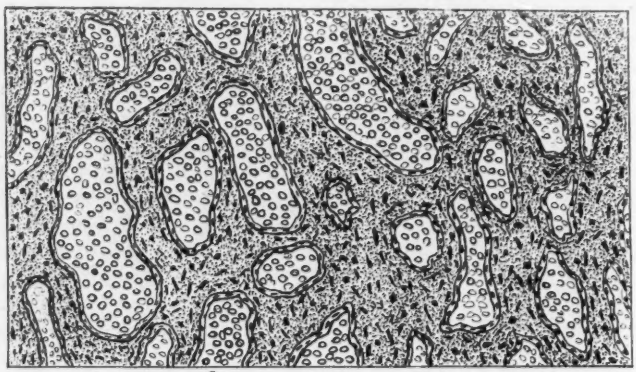
The following case is reported on account of the rarity of the affection. I have seen but two reports in recent literature, one by Dr. Cobb, of Boston, read before the Pan American Medical Congress, and the other of two cases read at the Philadelphia meeting of the American Medical Association by Dr. Pierce, of Chicago. Dr. W. Freudenthal and Dr. J. O. Roe have also reported cases.



Microscopic Section, Cavernous Angioma; low power.

W. H., male, age thirty-two, clerk, came to me August 13, 1898, with a history of hemorrhages from the right nostril covering a period of eight months. He complained of difficulty in breathing through the right nostril, and said he thought there was a polyp in it. His family physician had also told him there was a polyp in the nose. Examination showed an irregular shaped reddish blue mass about $^5/_8$ by $^1/_4$ inch in size, freely movable under the probe and attached by a very small and short pedicle to the cartilage of

the septum about two-thirds of the way back from the front and about one inch from the floor of the nose. Thinking it might trouble me by bleeding I prepared for the hemorrhage before attempting removal. I then applied the cold wire snare and slowly removed, twisting the pedicle somewhat before detaching. The bleeding was profuse and came from an area hardly larger than the head of a good-sized pin. The galvano cautery point was at once applied to the bleeding point and partially checked the hemorrhage. The forward part of the nostril was then packed with iodoform gauze strips, soaked alternately in peroxide of hydrogen and an antiseptic oil. When a number of these had been introduced the bleeding ceased. The gauze was removed two days later and no bleeding followed. Twelve days later there had been no recurrence of hemorrhage and healing had taken place over the site of removal. Since that time I have not seen him.



High power, same section, showing spaces filled with corpuscles.

Microscopic examination showed the tumor to be a cavernous angioma with but little interstitial substance. The blood spaces were filled with corpuscles and were of every size from very small to very large. The interstitial substance was connective tissue of the round celled variety for the most part, though containing some spindle cells. The epithelial cells of the surface were of the pavement celled variety in most places, yet were in places cylindrical. The majority of the blood spaces were lined with very thin endothelium and very irregular in shape. Scattered throughout the

tumor were others perfectly round and showing the structure of a vein with a minimum amount of elastic tissue. The accompanying cuts drawn from the microscopic specimen show the characteristics of the tumor. There was nothing at all sarcomatous about the tumor; it was simply a collection of various shaped and sized spaces separated from each other by a small amount of interstitial tissue, a true cavernous angioma so far as structure is concerned. To define it with a little more accuracy, considering that it is not a dilatation of capillary vessels normally existing in the locality, but a true extension of them outward, forming a new growth (an ectasis), it is probable that the term telangiectoma is the correct term to apply to it, rather than simple angioma. Dr. Pierce, in the paper already referred to, called his cases telangiectomata of the septum.

That these bleeding polypi of the septum are rare is proven by the fact that Cobb had found in 1893 but twenty-one recorded cases, and the records of the Massachusetts General Hospital showed but one case in 7,429 cases in the throat and nose department, while J. N. Mackenzie, with his large experience, had at this same date seen but one case of a similar nature.

Angioneurotic Edema of the Nose—WALTHAM—*Am. Med. Surg. Bulletin*, October 10, 1898.

This peculiar affection occurred in a young man of good health. He had attacks of eruption resembling erysipelas. The attack commenced at the bridge of the nose and extended to both cheeks. The skin was tense, very red, but no itching, pain or fever. In three or four days the eruption suddenly disappeared leaving no sign of previous inflammation. Six months later a similar attack came on. Zinc valerianate, in two to three grain doses, every four hours, relieved the patient. There has been no relapse for about three months.

[An examination of the turbinals should be made, as not infrequently an erythema of the nose is due to engorgements of the erectile tissue, and applications of the galvano-cautery act happily in such conditions. M. D. L.] LEDERMAN.

MODERN POSSIBILITIES IN CHRONIC CATARRHAL DEAFNESS.*

BY SARGENT F. SNOW, M.D., SYRACUSE, N. Y.

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The dismal prognosis given in cases of chronic catarrhal deafness by many authorities has restrained us from placing on record some conclusions which, for the past five years, have been making themselves manifest. Even now, a paper on the subject is advanced with humility, begging that you will overlook apparently radical or dogmatic assertions, for they come at least from honest convictions.

Ancient and modern literature on this subject is well known to you all. The valuable work done by these eminent men is fully appreciated, and is being utilized in our attempt to get more favorable results in so-called hopeless cases—we say *is being utilized*, because the technique of work and treatment used are in no wise original or peculiar to ourselves. Simply a *more persistent* application of the rational methods adopted by most progressive aurists of the day.

Within the past few years much has been written in relation to operative procedures within the middle ear to relieve those cases having distorted, ankylosed or bound down ossicles; but very little has been said regarding those that might be termed "non-operative" cases of chronic catarrhal deafness.

A paper is now presented with the hope of reviving the interest in a condition so neglected, yet so common, and so worthy of our best efforts; also with the thought of bringing to your notice a sample of the results being obtained, and which I believe others will get, and are getting if they encourage their patients to submit to a complete removal of nasal causes, and persevere in proper tonic and alterative treatments to the membranes.

The term "Modern Possibilities" is made use of in the title, for it is due to recent advances in therapeutic and surgical science that old traditions are being overcome.

*Read at the Fourth Annual Meeting of the American Laryngological, Rhinological and Otological Society, Pittsburgh, Pa., May 11-12, 1898; Eastern Section of the American Rhinological, Laryngological and Otological Society held at Albany, January 24, 1898; Syracuse Academy of Medicine, March 8, 1898; County Medical Society, March 15, 1898.

Close on the discovery of the anæsthetic properties of cocaine, came the improved facility with which the nasal and post-nasal passages could be made healthy. Following along this line, it was found that acute and sub-acute cases of catarrhal deafness were very much benefited and usually promptly cured, by improving the condition of the membranes of the nose. In the more chronic cases, we were often taught that if, after inflation, the hearing were not improved, or if, after a course of treatment by generally accepted methods for six weeks, the patient showed no material benefit, it was a hopeless case and wrong to encourage him to continue further. With this point we could take issue, for in most chronic cases of catarrhal deafness, a six or eight weeks course of treatment will not, to much extent, improve their hearing power; whereas a *thorough removal* of pathological conditions within the nose and adjacent cavities, followed *persistently* from month to month, and if necessary from year to year, by proper stimulating sprays to the nasal membranes, and vapors through the Eustachian tube to the middle ear will, in a good percentage of cases, tone up the parts and bring, if not a complete cure, happy results.

Many a time we have followed the old rule, given the six weeks course of treatment, discouraged our patient, and sent adrift what, in the light of present knowledge, would be a favorable case, to become the prey of some enterprising quack.

Another tradition handed down to us is, that if we find bone conduction diminished, the prognosis is unfavorable. In not a few instances this has proved to be an unreliable rule, the neuritis clearing up promptly with the removal of tubal and tympanic trouble.

To illustrate some of the foregoing points, three decidedly chronic and unfavorable cases have been selected from our records that represent different periods in life, aged, respectively, twenty-four, forty and fifty-three, the last two surely being beyond the age in which would occur resolution of the trouble through nature's processes. A complete history covering such long courses of treatment would be too tedious to incorporate in this paper, so a brief *résumé* and some general observations will be made, taking them up in the order named.

Case I.—Miss M., aged twenty-four, came under treatment March 28, 1894, with history of much deafness in left ear for six years, and in the right three years, together with roaring and chirping sounds in the head, with no apparent change during previous ten months.

Examination showed enlarged middle turbinates, puffy membranes, granular pharynx, etc. Right drum red around edges over malleus and considerably depressed. Left drum not so red, but more opaque. Ossicles movable in each ear 50%. Air and bone conduction about equal, bone conduction slightly below normal in each ear. In the right ear she could hear numbers of two figures, spoken in conversational tone 6 inches, in whispered voice 2 inches. In left ear spoken voice 4 inches, whispered voice 0; slight, if any, improvement after inflation.

January 7, a period of nine months, during which time the operative work in the nasal passages had been completed and the parts healed, an examination showed a gain in the right ear of only 2 inches, and 6 inches in the left. She was then given *daily* treatments of camphor and iodine vapors through the Eustachian tube for five weeks, when a gain of 9 inches in the right ear was noted. This was significant, as previous attempts with bi-weekly treatments had failed to do much good.

Owing to financial reasons the patient was only seen at irregular intervals for short courses of treatment after February 15, 1895, to December 29, 1897, when she reported an almost entire absence of the noises in her head, freedom from colds and catarrhal troubles, though physical appearance remained about the same; the left ear had gained 12 inches for whispered, and 16 inches for spoken voice; the right ear 14 inches for whispered, and 24 inches for spoken voice. Time under treatment, three years and nine months.

Case II.—Prof. C. came under treatment June 4, 1895, complained of deafness of thirteen years' standing, coming on after severe exposure. Reported that for twelve years to above date hearing had remained about the same, but could be temporarily relieved by Valsalva's method of inflation.

Examination showed the common intra-nasal thickenings and post-nasal inflammations. Ear drums much depressed, dry and thin. Ossicles in right movable about 20%, in left 30% of the normal.

Right hearing distance was 0 for the whispered voice. Politzer's accumeter 20 inches. Left hearing distance 5 inches for whispered voice, accumeter 26 inches. Right ear not improved by inflation. Left ear improved 3 inches for whispered voice.

September 7, 1895, first test for hearing after nasal passages were put in shape surgically, showed no material improvement. Treatments were continued with slight exceptions twice a week until November 5, 1897, a period of two and one-third years, when examination showed right hearing distance to be 50 inches for whispered

voice, accumeter 20 inches. Left hearing distance 120 inches for whispered voice, accumeter 30 inches. A gain for whispered voice in right ear since beginning treatment June, 1895, two and one-half years, of 50 inches. In left ear 115 inches.

Case III.—Mrs. A., aged fifty-three, came under notice October 12, 1892. Complained of extreme deafness, ringing, roaring and a variety of noises, which had remained about the same for fifteen years in the right ear, but the left ear became a little better and remained so until four years previous to examination. Right drum depressed, cloudy and fibrous in appearance, with redness around edges and over malleus. Ossicles movable 20%, light spot $^1/_3$ normal size. Left drum was not so cloudy, but the malleus was prominent, light spot $^1/_2$ normal size.

Testing the ear showed the right hearing distance for numbers in spoken voice to be 4 inches. Left hearing distance 12 inches. Bone conduction in the right ear appeared to be 20 seconds, and in the left ear 15 seconds below normal. Nasal passages contained numerous thickenings with consequent post-nasal and pharyngeal inflammations. Inflation appeared to double the power of hearing in the left ear. The usual operative course in the nasal passages was gone through with until July 6, 1893, when right hearing distance for spoken voice had improved from 4 to 8 inches. Left hearing distance from 12 to 32 inches.

She then became irregular in her attendance, only taking a biweekly course of treatment for a month or so, when she felt her deafness increasing. The intervals between relapses became longer, until sometimes she would go for three months without treatment, and with no apparent loss in hearing.

On December 5, 1896, tests showed a gain in right ear of 32 inches, and in the left 76 inches, from three and one-half years of very unsteady treatment. An examination was made at this time for whispered voice; right ear 24, and left ear 80 inches; the nasal and post-nasal membranes were in good shape with almost an entire absence of noises within the head; another two months' treatment was given, followed by a lapse until June, 1897, when it was found that in the previous six months she had gained for the whispered voice 8 inches in the right ear, and 60 in the left. Also, since beginning of treatment, October 12, 1892, a gain for the spoken voice of right ear 44 inches, and left ear 276 inches, or 23 feet. Last October she dropped into the office to say that she could see no need for treatment as there was a steady improvement.

The choice of the three foregoing cases from many, to illustrate "Modern Possibilities in Chronic Catarrhal Deafness" was made:

First—As I said before, because they represent three distinct periods in life.

Second—Because they were each of them cases of long standing deafness, decidedly obstinate and chronic in character; others, apparently as deep-seated, having responded much more promptly.

Third—Because each one presented well-marked pathological conditions within the nose; and

Fourth—Because records show that in each case I had tried to relieve them by the usual method of inflation, vaporizing, etc., for a period of two months, without material benefit.

With the case of the young lady, particular attention is called to the improvement obtained in five weeks from daily treatment, right ear 9 to 18 inches, left ear 10 to 20 inches, and would say that I have tried this active plan in several very obstinate cases with good results. The total gain in her case was, left ear from 4 to 20 inches, right ear 10 to 30 inches. Time under treatment three and three-fourths years.

N. B.—February 1, 1898. Since writing this paper, which was read by title before the Eastern Section of this Society in Albany, January 24th, the patient presented herself again after a lapse of six months.

Careful bi-weekly treatments were given for four weeks, when examination showed a gain in the right ear of 4 inches, and in the left of 10 inches.

This was interesting, because the auscultation tube had told me at each treatment, that the vapor was entering the middle ear freely, while in the right side the membranes of the Eustachian tube were so swollen that several treatments were given before the middle ear was reached. The improvement of 4 and 10 inches was commensurate with the success of the applications, and further, that bi-weekly treatments in her case now bring greater results than could be obtained by daily treatments three years ago.

In Case II, particular note should be given to the degree of deafness, its long standing—thirteen years—and to the amount of improvement from a shorter course of treatment, two and one-third years, 50 inches in the right ear, and $9^{3}/_{4}$ feet in the left, due no doubt to the persistence and regularity with which the patient kept to the work.

In Case III, the lady had reached the age where we should be very careful in giving a favorable prognosis, but the result obtained, a gain of 44 inches in the right ear, and 23 feet in the left ear, teaches us that even those of *advanced* age are *sometimes amenable* to treatment.

Another point is nature's kindliness in bringing about regenerative changes of her own accord, if thorough nasal work has been done. Since July 6, 1893, the treatments were irregular, and only just enough to restore tone to the membranes of the nose and Eustachian tubes when they became relaxed; this was necessary for a time every two or three months; latterly once in three months. Experience teaches that with regular and persistent treatment two or three times a week, our result would have been still more pleasing.

The question does not seem to be so much whether we have an atrophic or hypertrophic condition, *but did* the deafness primarily occur as a catarrhal inflammation, or is there so much fixation of the ossicles as to *preclude* a possibility of relief except through operative procedures?

If examination shows that the trouble *be* a catarrhal process, and there is a chance of stretching adhesions, absorbing inflammatory products, etc., with the patient's faithful co-operation, each year's added experience has given us *more* courage to make a favorable prognosis.

Many practitioners are opposed to the treatment of deafness in particular, and catarrhal affections in general. This influence is felt in families, and in those cases where prompt, energetic measures are *imperative*, may become pernicious. Their opposition is honest and comes from the unfavorable prognosis given by authorities for whom they have great respect. We *maintain* that the *conclusions* of *these authorities were based* on experience obtained under auspices *much less favorable* than the present; their *every effort* on the ear was hampered by recurring catarrhal inflammations which to-day we can, in a great measure, control.

Treatment of chronic catarrhal deafness may be divided into three stages: (1) The stage in which the necessary nasal operations are done; (2) the stage in which we await the result on nasal and post-nasal membranes of the operative work, relieve tubal occlusion; (3) that stage where we find that we have at last succeeded in building up the membranes so that they have more inherent power to throw off inflammations. This is a period at which, for lack of perseverance, but few cases arrive, the period attended by so many discouragements that both the physician and patient are put to the test; but it is the *only* period in which we can *satisfactorily apply treatments* to the middle ear.

In the first or second stage of treatment in these hard cases, little gain in hearing power need be expected; if some be obtained it is usually transient, though it seems best to carefully inflate and vapor-

ize the middle ear at each favorable opportunity. With that great army of chronic cases showing a lesser degree and shorter duration of deafness, correspondingly easier and quicker results will be obtained.

The tendency to gradually drop back to their old state if left to themselves, will depend upon their physical condition, climatic environment and the relation we get their membranes to bear to the normal. With moist atmosphere and sudden variation of temperature, care may be necessary, but numerous observations show that this is not a great hardship, as the relapses become less and less frequent.

As to methods and means adopted, we shall offer nothing particularly new, but would say that for reducing congestion, or restoring tone to the membranes, a light spray of iodole and ether, two grains to one ounce (see "Head-aches from Nasal Causes," by the author, *The Medical News*, July 10, 1897) sometimes applied to the nasal and post-nasal membranes, and a vapor of camphor and iodine carefully and thoroughly injected through the Eustachian tube into the middle ear appears to be very serviceable. (See "Diseases of the Ear," Dench, page 310.)

Finally, "Modern Possibilities in Chronic Catarrhal Deafness" appear much enhanced by the enlightened work being done on pathological conditions within the nose. An unfavorable result from a six or eight weeks' course of treatment is not a safe criterion for prognosis.

Nature is a prompt and ready assistant, if she be unhampered by co-existing nasal inflammations; and with practically restored normal membranes, the problem becomes one amenable to treatment.

204 E. Jefferson Street.

Nasal Catarrh and its Relation to Diseases of the Ear—W. S. BRENHOLTZ, Lancaster—*Penn. Med. Jour.*, October, 1898.

Much harm is done by the indiscriminate use of the nasal douche. Severe forms of otitis media are the direct result of its use in some instances of hypertrophic rhinitis as pointed out by Roosa. Some authorities claim that 90 per cent of ear diseases following some nasal or post-nasal affection, a large proportion of cases afflicted with tinnitus improve after proper nasal treatment. Beverly Johnson claims that aural complications are more frequent in atrophic rhinitis than in the hypertrophic form. Attention is called to the oft repeated warning in neglected cases of adenoid vegetations as the exciting factor in aural disturbances.

LEDERMAN.

GOUTY AND RHEUMATIC AFFECTIONS OF THE EAR.

BY SEYMOUR OPPENHEIMER, M.D., OF NEW YORK.

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The more or less intimate relationship existing between gout and rheumatism in this country, at least, and the conflicting theories suggestive of the etiology of the two diseases, preclude a separate consideration of each when studied as to the effects produced on the auditory apparatus. For the purpose of describing the local effects of these diseases as especially concerning the otologist, we may in general, consider the two as one affection, except in a few instances which will be discussed in their appropriate place. Therefore, to a proper appreciation of our subject it will be well to outline the changes produced by both gout and rheumatism on the various tissues of the body, reserving the pathology as regards the ear until later.

We must consider rheumatism as partaking of two forms, the acute and the chronic; the ear being occasionally involved in both varieties. In the acute form we find the joints are the parts mainly affected; there is hyperæmia and swelling of the synovial membrane and the ligamentous tissue, the fluid lubricating the joint becomes turbid, albumen and fibrin being present in increased amount. In chronic rheumatic affections involving the joints we find the synovial fluid diminished in amount, the cartilages are thickened as is also the capsule surrounding the articular surfaces, the sheaths of the tendons in the immediate vicinity of the involved joint undergo similar alterations and thus we find that movements not only of the joints but also of the neighboring muscles are restricted. In addition to this, in the form under consideration, the nerves supplying the parts undergo pathological change and consequently from the peripheral neuritis resulting, nutrition and inervation suffer and atrophy of the affected parts and especially the muscles supervene. The blood vessels also become the seat of a slowly developing sclerosis, adding to the changes already observed.

In the study of the morbid anatomy of gout we find an excess of uric acid in the parts directly involved by the disease. This extraneous substance, acting as an irritant, produces a local coagulation necrosis, with inflammation, hyperæmia, swelling of the ligamentous tissues and effusion into the joint.

Having pointed out the distinctive pathological features of each disease, we can, in a general way, speak of the relations existing between gout and rheumatism and the ear.

A study of the histological structures of the auricle and external auditory canal, reveals the presence of a large amount of fibrous tissue and cartilage, the two tissues especially susceptible to the morbific influences of the affections under consideration. The middle ear consists essentially of a cavity with two openings, the Eustachian tube anterior, and the antrum and attic posterior. Enclosed in this central cavity are the ossicles with their minute and complicated system of articulations, the stapes with the fenestrum ovale, the incus with the stapes and malleus and the malleus with the incus, membrana tympani and wall of the tympanic cavity. The mucous membrane of the middle ear being closely adherent to the bony walls, in part replaces the periostium and with its numerous folds divides the cavity into a number of secondary spaces. Concerning the inner ear, we find our subject needs consideration of the blood vessels only, the injurious effects of gout and rheumatism upon this portion of the auditory apparatus depending upon changes in the vessels and rarely affecting the delicate nerve filaments of the parts.

Although gouty and rheumatic affections of the auricle were studied many years ago, it was not until 1849 that W. Harvey, in a systematic paper, directed special attention to the morbid changes noted in the auditory apparatus resulting from these affections. In his paper he called attention to the fact that both gout and rheumatism affect the ear without any other changes in this organ being present, and also observed that the ear, already the seat of other pathological alterations, was liable to be affected in gouty subjects, thus in a way changing the character of the disease previously existing.

Accurate statistics as to the frequency with which the ear is affected are not easily obtained, the general opinion, however, being, that the internal ear and auditory nerve are very rarely affected, the tympanic cavity and membrana tympani more often than is generally supposed, while the external auditory canal and auricle will be found to be quite commonly influenced by the general affections, especially will this relationship be evident if a careful history be obtained in all ear diseases coming under our observation. Dench[1] says that gout and rheumatism exert more influence on the ear than is commonly supposed, and that it is not necessary to have constitutional evidences of the two affections. but the ear may be affected through a hereditary diathesis. The susceptibility of the ear in certain individuals, to the

injurious effects of gout and rheumatism, is explainable by the large amount of fibrous tissue composing portions of the auditory apparatus, the selective power of these diseases as has been seen, being well marked for this form of tissue, entering as it does into the composition of the larger part of the auricle and external canal and forming to a great extent the important ossicular articulations. Richey[2] in a paper on this subject, considered that the minute joints of the ossicles are liable to attacks of rheumatic arthritis from their exposure to atmospheric changes. That the rheumatic diathesis manifests itself in acute exacerbations as the result of sudden or prolonged alterations in the humidity of the atmosphere is well known, and no reasons exist when the disease is apparently limited to the joints of the ossicles, why it should not show itself here as it does in other articular surfaces of the body.

From the otologist's point of view, we are concerned with gout and rheumatism as being either hereditary or acquired. The acquired form of the disease as seen in the usual way and due to causes originating in the affected individual, manifests itself in the aural apparatus in various ways, being either clearly defined and then readily recognized as we will see later on, or may simply show itself as altering the character of some diseased process already present in the ear. The obstinate character of many ear troubles, especially eczema of the external auditory canal, and serous middle-ear catarrh is due in a considerable proportion of cases to the gouty or rheumatic diathesis. Hereditary gout as observed in this location may appear a short time after birth or later in life, the first rarely, but during adult life much more commonly. D'Aguanno[3] reported three cases of tardy hereditary gout of the ear in which deafness developed as soon as the patients arrived at the age of puberty. No other causes for the affection were found and the nose and naso-pharynx presented no deviation from the normal. The father had been affected with the gouty diathesis for years and as the result of D'Aguanno's study of these and similar cases, he concluded that among the ordinary forms of hereditary gout of the ear, there is a late variety which usually manifests itself at the age of from fifteen to twenty years.

Aural involvement from both affections occurs most often in advanced life and in males; this is especially so as regards the serous form of otitis, while the chronic sclerotic variety of middle-ear disease dependent upon rheumatic diathesis is not seen at any definite age, but occurs most frequently in the female sex and is associated with muscular rheumatism. Acute myringitis, depending upon the acute form of rheumatism and gout, occurs at any time, age and sex

apparently bearing no relation to this complication. Destructive processes of the middle and internal ear occur most frequently in males and at an advanced period of life, the patient suffering from the rheumatic or gouty diathesis a number of years before the ear becomes involved. General evidences of rheumatism may not be present, the auditory apparatus being affected primarily and on the subsidence of the aural inflammation, the nature of the disease will be seen by rheumatism of one or more large joints of the body. In gouty patients we usually find well marked evidences of the disease elsewhere before the ear becomes affected, although the hereditary form may not show itself anywhere but in the ear for a considerable period. In the large proportion of patients suffering from well marked gout, liability to occasional sub-acute dermatoses of the meatus is observed.

Both gouty and rheumatic affections, objectively and subjectively differ considerably when various parts of the auditory apparatus are affected; it will be well to consider in detail the different portions of the ear especially subject to the effects of these diatheses.

The auricle is very commonly the seat of deposits of nodular urates in gouty subjects, these crystals or amorphous masses are generally situated beneath the skin of the helix and do little harm, occasionally from pressure, inflammation is produced, the cause being recognized by the presence of a foreign body beneath the cutaneous surface. In both gout and rheumatism of long standing, the external auditory canal is frequently affected with a localized, subacute form of eczema, mild in character, but very resistant to treatment and leading to changes in the cutaneous lining. In many cases of eczema in this locality, treatment as usually applied is of no avail and the case only improves after constitutional measures directed to the primary disease have been instituted. The eczematous patch presents nothing of diagnostic nature; a history of the case as regards the presence of gout or rheumatism and the results of treatment alone allowing a proper diagnosis to be made. Resulting from denudation of the cutaneous lining of the canal and the increased moisture present, there is a considerable tendency to the development of vegetable parasites on the eczematous area.

Toynbee[1] referred osteomata of the canal to the gouty-rheumatic diathesis and although exostoses occur in this locality quite frequently in individuals of this class, yet no direct causal relation has been fully established. From the deposit of urates beneath the skin of the meatus a furuncle forms, while in severe attacks of rheumatism, a general condition of furunculosis of both external auditory canals

is occasionally seen. The membrana tympani is rarely affected without the middle ear at the same time being involved, but occasionally during an acute, violent attack of gout, transitory pain of the ear will be complained of, lasting for a few hours and rapidly passing away. If the membrana tympani be examined intense congestion of the manubrial plexus will be seen, the middle ear apparently not being involved, but when it is affected, the membrana tympani also participates in the morbid process. Both rheumatism and gout, but especially the former, produce their marked effects on the tissues of the tympanic cavity; these changes are varied, but in general may be divided into two main divisions, first, an acute and destructive process and second a chronic and insidious affection.

Acute rheumatoid otitis occurs during an attack of acute rheumatism, intense pain is complained of in the affected ear, paroxysmal in nature and affecting the entire side of the head, tinnitus slight at first, increasing in intensity until the patient is almost distracted with the sounds in his head and when the pain subsides there is a feeling of numbness of the affected ear and of the same side of the head. On examination of the middle ear under good illumination, the drum membrane will be seen to be intensely red and differing from the color usually observed in acute myringitis, being of the shade known as flamingo. Should the case now obtain relief, the affection rapidly subsides and the ear may speedily become normal or a moderate amount of deafness last for a few weeks. Uncontrolled, the affection increases in intensity, pus is developed and necrosis of the bone may result, the mastoid possibly becoming involved. This violent, acute form of rheumatic inflammation may lead to entire destruction of the ossicles and adjacent bone.

Again, we find the acute form to vary in a most striking manner in different individuals, being in no way affected by the intensity of the disease elsewhere, although should a number of joints be inflamed at the same time, the tendency to ear involvement is decidedly increased. In other cases it may manifest itself by redness of the drum head, moderate degree of deafness and a feeling of stuffiness in the ears, pain and tinnitus being entirely absent, this condition remains for a few days, the usual treatment being of no avail and then disappears without apparent cause, only to return when another rheumatic attack is imminent. A third form is characterized by intense pain only, the middle ear on inspection apparently being normal, while the tympanic membrane will give no evidence of the presence of disease of the parts, impairment of hearing and in fact all the symptoms of acute otitis except the pain are absent. This

may last for an indefinite time and relief will not be obtained until the rheumatic condition is ascertained and proper general anti-rheumatic remedies employed, for local treatment seems useless. As the result of these acute processes in the middle ear, marked alterations in the functions of the parts will result, but they differ in no way from those observed after non-rheumatic inflammations and need not concern us here.

Slowly progressing changes in the tympanic cavity occur both from gout and rheumatism and are independent of the acute affections just described, these changes usually develop early in an acute exacerbation of long standing rheumatism, the fibrous tissue being primarily involved and finally the nervous tissues participate in the pathological process. We usually find two distinct chronic affections involving the middle ear in which the gouty-rheumatic diathesis exerts a great amount of influence as a causative factor, the most common of these is chronic sclerosis of the drum cavity, the fibrous tissue being especially involved as we have seen. Previous to the sclerotic changes becoming characteristic, we find an initial semi-acute form of inflammation present; this occurs during an attack of the general disease and continues in the interval, the membrana tympani is neither normal nor red in color, while other symptoms are absent until the ossicular articulations become ankylosed and marked fibroid changes render the function of the parts less and less acute until deafness becomes almost, if not quite complete. This form of middle ear sclerosis differs only in its etiology, from that due to other causes, but it should be remembered that as a result of gout and rheumatism, the latter especially, we find the brunt of the disease is borne by the joints of the ossicles and, therefore, serious damage to the hearing will eventually result.

The other form of otitis in which these general affections exert a distinct influence, is that characterized by a watery, serous discharge from the middle ear. Pus is never present and the affection is not always confined to the middle, but frequently invades the external ear. Sexton[5] says that the serous form of otitis media is found nearly always in rheumatic or gouty subjects. The progress of the disease is slow, months and years passing before cure is complete and relapses are frequent, depending upon the presence or absence of the constitutional disorder.

The delicate structures of the labyrinth and cochlea do not apparently participate in the morbid process, except when the middle ear and adjoining parts undergo extensive necrosis, the result of a severe attack of rheumatism. As an indirect internal ear involvement, how-

ever, we occasionally find changes in the vestibule and cochlea, resulting from artero-sclerosis of the minute vessels ramifying through these regions. As the result of long continued rheumatism in advanced life, there is a considerable degree of degeneration of the arterial walls throughout more or less of the entire arterial system, the peripheral vessels supplying special organs such as the one under consideration, from their small calibre and delicacy being less resistant to these degenerative processes. In the internal ear these changes are occasionally manifested, the structures composing the arterial walls becoming degenerated and rigid from deposits of lime salts. From the diminished resistance of the diseased vessels to an increased blood pressure, rupture occurs and the ordinary symptom-complex of labyrinthine hemorrhage is produced. The patient complains of irregular subjective forms of tinnitus, with impairment of hearing and vertigo, varying with the amount of destruction in the internal ear. When the vessel wall ruptures these symptoms appear very rapidly, but may rarely develop in an insidious manner, several months elapsing before becoming well defined and in this case the blood is not poured out through a rupture of the arterial wall, but escapes from capillary oozing.

Rheumatic paralysis of the auditory nerve has been described by McBride[6] as occurring during the course of acute rheumatism; deafness is marked and bone conduction is diminished or lost, but vertigo does not always occur. The affection is but temporary and as the general disorder subsides, the aural symptoms gradually disappear, a slight impairment of hearing alone remaining.

The diagnosis of these changes in the auditory apparatus is readily made if attention be directed to the etiological influences of the gouty-rheumatic diathesis in all stubborn cases of the various forms of ear affections. The prognosis will, of course, depend upon the original cause of the ear affection, in general being good in both gout and rheumatism and depending upon the promptness with which general treatment is instituted. Local treatment, except in acute inflammations is of little value, general anti-rheumatic medication alone being of service.

REFERENCES.

[1] Dench, Diseases of the Ear.
[2] S. O. Richey, Ninth International Medical Congress.
[3] D'Aguanno, *Revue Internat. de Rhin., Otol. et Laryng.*, Sept, 1896.
[4] Toynbee, Burnett's System of Diseases of Ear, etc.
[5] Sexton, Diseases of the Ear.
[6] McBride, Diseases of the Nose, Throat and Ear.

706 Madison Avenue.

SUBACUTE DIFFUSE EXTERNAL OTITIS.

BY LEWIS S. SOMERS, M.D., PHILADELPHIA, PA.

Subacute diffuse external otitis, as the name indicates, involves the major portion of the external auditory canal and is characterized by infiltration and desquamation of the epithelial lining; running a prolonged course, but not at any time presenting an acute character and differing from chronic otitis, inasmuch as the inflammatory process is more active and the duration of less extent. This affection is usually observed when both dermal surface and periosteum are involved, the several tissue layers becoming affected at, or near the same time and as a general rule it originates in the inner portion of the canal.

Traumatism plays an important part in the etiology, it being frequently due to the insertion of hair pins or the finger into the ear, but may also result from animal or vegetable organisms, either macro-or-microscopic. Again, the affection may be due to excessive glandular activity and in a number of cases, some degree of subacute inflammation results from the long continued presence of an inspissated mass of cerumen. Constitutional conditions as the exanthemata may be factors in the etiology and frequently the affection results as a consequence of the diminished resistance of the tissues, due to vasomotor paresis, tropho-neurosis, etc. The most frequent causes, however, are the rheumatic and lithemic diatheses, probably 60 per cent of all cases presenting the symptom-complex incident to this affection, give other and more marked evidences of an excess of uric acid. The affection may be primary or secondary, the latter subsequent to serous or suppurative middle-ear diseases, the irritating discharge from the middle ear producing the changes in the external canal.

The following case illustrates the condition: A. B., male, aged thirty-five years. Was seen March 18, 1897, complaining of slight tickling in the right canal, which he was temporarily able to relieve by scratching the parts with his finger and a match stick; hearing was unaffected and at irregular intervals there would be sharp, shooting pain lasting for a few seconds. Examination revealed the presence of a small amount of cerumen, the canal walls and membrana tympani apparently being normal. One week later

the case was again seen with the history that the symptoms had not improved and that there was some impairment of hearing. The canal was slightly reddened and there was thickening of the dermoid lining and drum-head, with a moderate degree of epithelial desquamation, most marked at the junction of the cartilaginous with the bony portion.

This gradually increased in intensity until April 1 when the canal contained a small amount of moist epithelial debris, the affection reaching the membrana tympani by gradual extension; the drum was macerated from fluid exudation, white in color and a portion of the anterior inferior segment was extremely thin, the outer layer destroyed and the two inner layers alone remaining. On the same date the muscular and mucous membrane layers became necrosed and a perforation resulted as large as the segment of the drum. The left ear was normal, there was no vertigo, tinnitus or constitutional symptoms and there had not been any previous trouble with the ears; the middle ear not being involved at any time during the course of the affection. April 4. Hearing slightly impaired, but gradually growing worse, all other symptoms moderated and desquamation has ceased. The normal mucous membrane of the middle ear is plainly visible through the perforation, the periphery of the drum and especially the manubrial plexus is congested and the necrotic area over the anterior inferior segment is becoming circumscribed. The affection progressed favorably, with semiacute exacerbations, until April 24 when all symptoms had disappeared, except slight pruritus and the hearing was again normal as tested by the telephone. The drum was thickened, but not retracted, somewhat opaque and there was a cicatricial depression at the site of the previous perforation.

The symptoms vary, depending upon the degree of irritation and the extent of the inflammatory reaction. When the otitis is dependent upon middle-ear disease, the symptoms are generally moderate in severity, while in rare instances when due to constitutional causes, subjective symptoms may be absent during the entire course of the affection, the changes in the canal being discovered accidentally. The local symptoms vary from a moderate degree of pruritus to severe pain, tinnitus and impaired hearing, the latter depending upon involvement of the drum-head and obstruction of the canal. The first sign attracting the attention of the patient, is a slight itching, this is usually increased by the introduction of foreign bodies to allay the pruritus, then follows the discharge of a few flakes of epithelium and blood-stained serum, which increases

in amount and often becomes sero-purulent, depending upon secondary infection from the superficial tissues exfoliating and leaving the canal wall excoriated. The serous transudate moistens the epithelium and causes it to increase in volume, filling the canal and producing pressure absorption of the soft tissues. While in other cases there is little or no exudation and the inflammatory activity is directed towards epithelial proliferation, the pavement cells being thrown off rapidly, forming a mass in the deeper portion of the canal. Stenosis results from hypertrophic changes in the basement membrane, this, however, seldom involves the entire canal, but is distributed over various areas and when marked, the patient in addition to the other symptoms, complains of subjective auditory sensations, autophony, especially being most distressing.

The general symptoms are not prominent unless the affection is severe, when there may be a slight rise of temperature in the initial stage and disappearing when desquamation begins. Reflex symptoms are occasionally observed, head-ache and cough being the most frequent, while there may also be severe pain over the branches of the fifth nerve. As a result of the extension of the morbid process, changes may take place in the middle and internal ear; there may be congestion of the mucous membrane of the tympanic cavity and in very severe cases the increased blood pressure and excessive exudation may produce serious labyrinthine changes with consequent vertigo, marked impairment of hearing and tinnitus. When from pre-existing middle-ear disease or faulty anatomical development the Rivinian segment is imperfectly closed, the inflammation is apt to extend by continuity and otitis media result, while suppuration of the tympanic cavity may also occur when the inflammation involves the membrana tympani and produces perforation. Pus is rarely found in the canal, except as an accidental infection, usually as the result of imperfect antiseptic precautions, but occasionally the disease assumes a severe form and sepsis results with the formation of a localized slough. Involvement of the membrana tympani occurs in about 20 per cent of all cases and greatly increases the liability to impairment of hearing. When the inflammation extends to the drum-head the appearance varies, depending upon the degree of inflammatory reaction and amount of exudation, it may be saturated with effusion, bulging externally and appearing to fuse with the external canal wall at its superior and posterior edges, or there may be congestion varying in degree and extent; again the membrane may only lose its lustre and become dull or opaque.

The principal affections to be differentiated are the parasitic and desquamative varieties, eczema and seborrhea. The latter is characterized by the localization of the affection to the cartilaginous portion of the canal, the presence of small, thin, yellow crusts, which are readily detached, the oily appearance of the surface and the underlying skin is red in color but not moist. In eczema the crusts are larger, adhere firmly and are composed of desquamated epithelium moistened with serum and agglutinated into masses. These dry and form thick, irregularly shaped, yellowish-brown crusts which involve the entire canal and even the tympanic membrane. They are removed with difficulty and underneath each crust is a red, moist area which dries slowly and becomes covered with a film of thin serous transudation, the true skin being thickened from infiltration of the deeper layers. Desquamative otitis is recognized by the absence of marked inflammatory reaction and the presence of a compact white, epithelial mass often filling the deeper portion of the canal. The walls are moist and the superficial epithelium is easily wiped off with a probe. The parasitic form is similar to the subacute variety, both in regard to its course and objective symptoms. The canal and drum may be covered entirely or in isolated patches, with a white or yellowish-white deposit, closely adherent to the underlying skin, and when removed the surface is moist and denuded. The deposit macroscopically resembles to a most striking extent a mass of moist blotting paper and occasionally may be removed in large sheets, rarely an entire cast of the canal may be obtained, resembling the finger of a glove, but when examined under the microscope the nature of the affection becomes at once apparent.

As a result of neglect, the affection may assume a chronic course, especially when the individual is broken down physically; the subjective symptoms practically disappear, but local infiltration remains for a long time. In some cases, the chronic course may be prognosticated when the subacute affection occurs in individuals the subject of a marked morbid diathesis, when the affection comes on very slowly and is accompanied with little or no subjective symptoms. Exostoses may follow excessive desquamation and infiltration, and as a result of involvement of the drum we may have a permanent perforation or it will be covered with a movable cicatrix.

The prognosis is favorable as regards the termination of the affection within a comparatively short time, but when it assumes a chronic form it may persist for several years, in some cases with the production of stenosis or strictures from membranous or

osseous septa. The outcome will also depend upon the damage to the membrana tympani, and in addition to the sequelæ already mentioned, we are apt to have retraction and thickening of the drum with deposit of lime salts. In making a prognosis it is important to consider not only the course of the affection, but to ascertain the probable result as regards the functional capacity of the auditory apparatus.

Treatment should be both local and general. The removal of any dyscrasia that may be considered as a cause is most important, and until the general condition of the patient is satisfactory, little can be done locally to restore the canal to its normal condition. The salicylates are necessary in the majority of cases, the affection as previously mentioned often being a local manifestation of the rheumatic or lithemic diatheses, and appropriate medication directed to this end is the proper course to pursue. Dry heat may be used in the early stages before maceration occurs, being applied through a thin metallic tube in the same manner as a dentist uses hot air to a tooth cavity. To remove the secretions the canal is wiped out with a tuft of sterile cotton moistened with peroxide of hydrogen and powder, oil, ointment, or whatever seems best suited to the individual, are applied. The most satisfactory results in my hands, however, have been obtained by cleansing the canal as indicated above, then applying an ointment composed of one grain of the yellow oxide of mercury to the drachm of lanoline, this being repeated every other day. Antiseptic powders may be used if carefully applied, but they are not as valuable as ointments. Boric acid alone or in alcoholic solution may be used, or salicylate of chinoline, one part to sixteen of the former, may be tried. Salicylic acid has been recommended by Dunn in the proportion of one drachm to the ounce of collodion. It is painted over the parts and is somewhat painful for a few moments, but stops pruritus and forms an efficient protective coating.

3554 North Broad Street.

Chorea Minor due to a Foreign Body in the Ear—MAX. BREITUNG —*Gazette Hebdamodaire de Med. et de Chir.*, May, 1898.

A girl of thirteen years suffering from chorea minor was found to have a small piece of lead resting upon the membrana tympani, the removal of which was followed by a complete cure of the chorea.

SCHEPPEGRELL.

THE MODERN THERAPY OF SUPPURATIVE OTITIS MEDIA.

BY M. A. GOLDSTEIN, M.D., ST. LOUIS.

In the consideration of a purulent discharge from the middle-ear cavity, two systems of treatment have long contended for supremacy; one the so-called "dry treatment,"—the other the irrigation and syringing of the affected parts with various antiseptic solutions.

Each method of treatment has its advantages and disadvantages, and in their application the pathological status of the involved area, the character of the discharge and the size of the perforation in the membrana tympani should all be taken as factors in deciding which system to employ.

Where the discharge is copious and the pus thick and ropy, the application of the syringe with a gentle current of a mild, warm antiseptic fluid is advocated to clear the canal to the surface of the membrana tympani. In but few conditions of purulent otitis, however, have I found the use of fluids injected into the external canal for the purpose of clearing it of pus as satisfactory as the similar method of dry cleansing.

The technique in surgery which has found general favor of late is the "dry dressing." Its advocates and enthusiasts claim for it a more rapid healing and repair, a more natural covering and less irritation of the injured surface and less danger from infection of the surrounding areas. The wet dressing always produces a sodden and infiltrated surface, and as this in the ear is generally applied to a mucous membrane, it frequently unintentionally produces the very condition which it is our purpose to subdue.

In the therapy of middle-ear suppuration we aim to remove pus and other fluids from the infected cavity, and this purpose is certainly thwarted by the liberal use of the syringe and other forms of irrigating the auditory canal and middle ear. The small tuft of sterilized cotton on the tip of the probe or cotton carrier, gently applied as a mop to absorb the mucous or purulent excretions from the ear will, in the majority of cases, cleanse the canal to the tympanic cavity, if need be, more effectively than will a large current of antiseptic fluid. Where a large perforation of the membrana tympani exists, as is usual in the majority of cases of chronic suppurative otitis media, there is an additional danger in the free use of the

syringe of forcing some of the fluid into contact with the remote and healthy areas of the tympanic cavity, and thus carrying some of the purulent discharge and fresh infection to another point. It may, perhaps, not be unreasonable to conjecture that frequent mastoid infection has resulted from the freedom with which the otologist handles the syringe in the treatment of suppurative otitis media.

A factor of great value in the consideration of the "dry treatment" is its efficiency in preventing infiltration and softening of the mucous membrane of the tympanic cavity, a condition which is invariably produced by repeated applications of watery solutions to a pathologic mucous membrane.

The mucous membrane of the tympanic cavity during a suppurative otitis is constantly bathed by the purulent secretion resulting in this sodden condition of the membrane, and this is only accentuated by the further addition of aqueous medications. It is this very stimulation and irritation of the mucous membrane by the fluids with which it is pathologically brought in contact, that causes granulation and polypus formation.

In the application of the dry system of treatment I have frequently noted that the tendency to the formation of granulation tissue has been reduced to a minimum.

In emphasizing this form of dry dressing, I have taken into consideration only the simple forms of suppurative otitis media. Of course, where a suppuration of long standing has resulted in necrosis, a considerable destruction of the soft tissues of the middle-ear cavity or involvement of the mastoid area, more radical therapeutic and especially surgical measures must be adopted.

In cleansing the purulent discharge from the middle ear I first mop the canal as thoroughly and as clean as possible. If but a small perforation exists and the cotton tuft cannot find its way into the tympanic cavity, there is always a possibility of retention of the purulent matter, and a tendency to chronic suppuration. Where no pain or discomfort exists I frequently use the Eustachian catheter in conjunction with a Globe nebulizer with iodine, 3 grs., carbolic acid, 4 grs., and benzoinol, 1 oz., and by steady inflation frequently succeed in forcing the residue of the purulent secretion through the small orifice of the membrana tympani into the auditory canal. This has a two-fold advantage of forcibly ejecting the purulent contents of the middle-ear cavity and also of applying an antiseptic to the delicate mucous membrane without the ill effect of infiltration of same.

As an additional means of evacuating the contents of the tympanic cavity, especially where but little congestion is apparent, I occasionally apply a Siegle speculum and by suction draw the muco-purulent fluid even through a small perforation. The more promptly the tympanic cavity is evacuated of infecting fluids and the greater care exercised in the minute cleansing of the parts, the more speedily will a cure be obtained.

After each cleansing a non-irritating but efficient impalpable antiseptic powder should be insufflated in the auditory canal. For many years boracic acid has been the panacea for nearly all the ills the ear is heir to. Boracic acid, however, is but a mild antiseptic at best, and in the experience of every worker it has been frequently found inert and impotent. Next in importance to boracic acid, iodoform has long held rank as a dry dressing in aural surgery. Its objectionable odor to both the operator and patient and its stimulation of granulation tissues when in contact with mucous surfaces detracts from its value as a powder dressing.

As otologists, we are constantly on the alert for an antiseptic in powder form, available as a dressing in suppurative and inflammatory conditions of the middle ear, more potent than boracic acid and less disagreeable and less irritating when in constant contact with these tissues than iodoform, exhibiting no tendency to cake or clog in the auditory canal and offering but a minimum of toxic absorption.

When nosophen was brought to the notice of the profession as a superior antiseptic and as a dressing fulfilling the majority of the requirements of the ideal powder in otology, I did not hesitate to give it a thorough trial, and in the use of this preparation in this class of cases during the past year I am pleased to say that the results have been thoroughly satisfactory, and that in both private and clinical work I have substituted nosophen for boracic acid.

Where large perforations of the membrana tympani exist in conjunction with suppurative otitis, I have successfully used the dry gauze tampon, as advocated by Dr. Alice Ewing.* The gauze is lightly introduced, filling the external auditory canal, its distal end producing mild pressure on the mucous surface of the tympanic cavity. This dressing is renewed as frequently as the profusion of the purulent discharge demands.

The gauze may be either the plain sterilized or the nosophen gauze which works admirably in conjunction with the nosophen powder dressing. The double cyanide gauze, still the favorite with English surgeons, has also been satisfactorily used in this manner.

* Gauze Packing for Suppurating Ears; *The Laryngoscope*, Vol. IV, No. 6, p. 357.

The only fluid medications which I have used liberally and freely in the treatment of suppurative otitis media are the saturated solution of boracic acid in absolute alcohol and hydrozone. The boracic acid alcohol offers a satisfactory means of reducing small granulations occurring in the course of chronic middle-ear suppuration. Hydrozone is a superior and concentrated product of peroxide of hydrogen, which is of inestimable value in seeking out small pus pockets which are not within reach of the mop or syringe. In the application of both the alcohol and hydrozone I use the medicine dropper in preference to the syringe, and where it is intended that the fluid should penetrate the tympanic cavity, the desired point may be reached by shifting the head of the patient.

In conclusion I desire to emphasize the necessity of careful cleansing and thorough antisepsis of the naso-pharynx in the treatment of suppurative otitis media.

Endo-Cranial Complications of Purulent Otitis Media—GRADENIGO—*Revue Int. de Rhin., Etc.*, July, 1898.

A rapid diagnosis in these cases is the principal element of success. The following symptoms demand special attention: optic neuritis, cephalgia, slowing of pulse, rigidity of neck, difficulty of deglutition, vertigo and nausea, and fever. The patellar and superficial reflexes are usually diminished in meningitis and exaggerated in cerebral abscess. SCHEPPEGRELL.

Threadworms in the Ear—KOEBEL, Stuttgart—*Am. Med. Surg. Bulletin*, October 10, 1898.

A young female child, one and one-fourth years old, after a violent attack of retching, choking and sneezing, passed a threadworm more than a finger in length, the worm making its appearance at the external auditory canal. The child had suffered for five days from a suppurative otitis media as a sequel to an attack of pneumonia. The worm must have passed through a perforation in the membrana tympani to appear in the external auditory meatus. Before the worm appeared the child had severe colic. In eight days the drum had healed. LEDERMAN.

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EDITORIAL.

THE LEGISLATIVE REGULATION OF THE SALE OF COCAINE.

The abuse of cocaine has reached such proportions that special laws regulating its sale have been considered in several States and already enacted in Louisiana and Texas. The penalty for the infringement of these laws is a fine of from $10 to $100, and in the case of New Orleans also imprisonment.

The need of such laws and their enforcement is becoming more and more pronounced. There is no drug which has been on the market for such a comparatively short time in which the abuses have become so formidable. While cocaine is one of our most useful agents for local anesthesia, its abuse for other purposes is becoming so extensive that many physicians have questioned whether it has really not effected more evil than good, and even

the most conservative are realizing its danger. That physicians in general do not understand the possibilities of this drug for evil is evidenced by the fact that it forms a part of innumerable prescriptions for coryza, hay fever and other conditions, in which the benefit is transient, or only apparent, in fact in which the effects may really be injurious, and the habit easily established. In a recent foreign periodical *(Clinica Moderna)*, a snuff containing 25%(!) of cocaine hydrochlorate is deliberately recommended for the use of patients suffering from chronic hypertrophic rhinitis. Were this an exception, it would not require special comment, but it is becoming entirely too frequent, and is laying the foundation of an evil which is becoming more and more difficult to combat.

It is not generally known that several of the patent medicines, which are sold in the form of snuff for "colds," hay fever, etc., owe their transient pleasant effects to the cocaine which they contain. While the quantity is usually not sufficiently large to give rise to direct toxic effects, its continued use is undoubtedly injurious to the nasal cavities, and it is not improbable that the cocaine habit may also be established in this manner. The sale of such drugs should also be regulated by the laws referring to cocaine in general.

Attention has recently been called to a special development of the cocaine habit (Scheppegrell, *Medical News*, October 1, 1898), which is on the increase in the Southern States, especially among the negro population. The cocaine is used as a kind of snuff for its exhilarating effect, and is dispensed in small packages which are sold by druggists at from 5 to 10 cents each. That the evil has reached considerable proportions is demonstrated by the fact that some druggists were in the habit of selling more than 100 packages of cocaine per day. The records of the criminal courts bear evidence of the fact that the evil results are far more striking and rapid than from the morphine habit.

It is through the agency of this practice and its pernicious effects that public attention has been called to this evil, which has resulted in the enactment of laws in Louisiana and Texas. This example should be followed in each State, as it is far better to anticipate an evil than to correct it after its development.

Physicians are frequently to blame for the development of the cocaine habit. In view of the many dangers which attend its use, this drug should never be placed in the hands of the patient. Few druggists hesitate to refill the physician's prescription, and often when it is too late, the physician may see the evil result of placing such a drug in the hands of the patient. SCHEPPEGRELL.

SOCIETY PROCEEDINGS.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON LARYNGOLOGY AND RHINOLOGY.

Stated Meeting, October 26, 1898.

Dr. Jonathan Wright, Chairman.

Dr. Thos. J. Harris, Secretary.

An Efficient Laryngeal Forceps.

Dr. Robert C. Myles exhibited a laryngeal forceps which had served him well in the removal of subglottic growths, especially papilloma. It does not interfere at all with the field of vision.

Angioma of the Septum.

Dr. Myles referred to a patient under his care, fifty years of age, who presented a fungating mass on the septum that had existed about three months. It seemed to consist of both venous and arterial branches and bled constantly. There was a solid attachment to the anterior part of the septum.

Dr. Wolf Freudenthal said that he had had a case of bleeding polypus of the nasal septum—a condition which seemed to him like that described by Dr. Myles. Usually it had its origin in traumatism. This growth bled freely on being removed with the snare. There had been no recurrence although the operation was done about five years ago.

The Chairman said that he had had half a dozen or more cases of angioma of the septum, and it seemed to him the most common of the benign neoplasms of the septum.

Syphilitic Exostosis of the Superior Maxilla.

Dr. Wendell C. Phillips presented a young man who had been brought to him the previous evening by Dr. Fenn, of New York. The patient had contracted specific disease about two years ago, and had gone through a short course of treatment only. About this time he began to have a good deal of pain in various parts of the face, and subsequently the teeth were tender and became loosened. The pain was most intense in the fifth nerve, and was much worse at night. He came to Dr. Fenn about six months ago, and that gentleman, being a dentist as well as a physician, could probably describe the condition better than he.

Dr. Fenn, being invited to speak, said that there seemed to be absorption of the alveolus and the roots of the teeth; at the same time they came away without any peridontal attachment. There was no pus or other discharge.

Dr. Phillips, continuing, said that examination showed apparently a large exostosis of the maxillary bone, which would lead one to think there was antrum disease. However, there had been no symptoms of this. On transillumination the light was very bright on both sides, and of equal intensity, with the exception of a small dark spot on the cheek just about opposite this growth. There was no difference in the reflected light on the two sides. Under mixed treatment the improvement had been marked and rapid.

A Case of Chronic Urticaria of the Larynx.

Dr. W. Freudenthal reported a case of this kind occurring in a man fifty-nine years old. He said that only a very few cases had been reported of urticaria of this region. He had never seen a case of chronic urticaria of these parts before. The case had come under his observation in 1891. There was then a diffused redness of the epiglottis. He was treated both locally and generally for about eight months without benefit, and was finally cured during a sojourn in the country. Five years later there was another attack. At this time he mentioned that he was subject to general urticaria. In March, 1898, he had a third attack. The affected area was found to be insensitive even to very strong local applications. This man had his first attack of urticaria in 1856, and was treated for it in Budapest. In 1889, while living on a rather generous diet, the urticaria returned, and was not relieved by the treatment which had proved successful in previous attacks. A cure occurred spontaneously while he was living rather frugally in a boarding house. The patient's complaint of a foreign body in the larynx was apparently nothing more than itching, and the localized edema the counterpart of the wheal so commonly observed with urticaria of the skin.

Laryngeal Carcinoma.

Dr. Frank A. Bottome presented a woman, fifty years of age, who, one year ago, began to have some difficulty in swallowing. No stricture of the esophagus was found. Last July she had an attack of what was supposed to be la grippe, and following this there were some hoarseness and pain. He had then examined the larynx and found a small tumor, cauliflower in appearance, and attached entirely to the left ventricular band. Examination by Dr. Hodenpyl showed the growth to be a typical epithelioma. There was a strong family

history of cancer. Dr. McBurney saw the case and advised against operation because he believed the carcinoma had originated in the esophagus. As to the advisability of removing cancer of the larynx, Dr. McBurney said that he was very much against these operations because he thought the patient was very much worse than before the operation. So much had been said of late about cancer of the larynx that this opinion from such an eminent general surgeon seemed to be of special interest.

Dr. Francis J. Quinlan said that some years ago he had seen a case in which the diagnosis of tuberculous laryngitis had been made by two experts and confirmed by a microscopist. The subject was a woman about twenty-two years old, and there were absolutely no symptoms either subjective or objective. Several sections were made of the growth, and the microscopist then found it to be a true carcinoma. On operating, an enormous growth was revealed which had destroyed a large part of the posterior laryngeal wall.

Dr. Phillips thought that there could be only one opinion about these cases, *i. e.*, that they should be considered inoperable unless seen sufficiently early to make partial resection of the larynx feasible. Certainly the case just presented must be classed as inoperable. Such growths are bound to recur and cause as great, if not greater, suffering than before. About one year ago he had presented to this section a clergyman upon whom he had operated for the removal of what was considered to be a papilloma. There was no involvement except a portion of the vocal cords. It was reported to be a case of true epithelioma. The man recovered well from the operation, and could to-day speak distinctly and with a fairly loud voice.

Dr. Myles said that he believed the case just examined to be one of esophageal growth. He had seen a number of these—all in women. The growth must have existed more than a few months. He was a strong advocate of the operative treatment, but the trouble was that the methods of making a sufficiently early diagnosis were still very imperfect. The early microscopical appearance is not sufficiently distinctive to give much aid.

Dr. Freudenthal said that he had under treatment a man, about seventy five years of age, who complained of intense pain on swallowing. A large probe could be passed into the esophagus. There were no glandular swellings. The larynx showed what appeared to be an infiltration between the arytenoids. The diagnosis was probable carcinoma of the larynx.

Dr. Quinlan remarked that in the past three years he had seen two cases, and the wives of both had died of cancer of the breast.

Dr. M. D. Lederman said that the question arose as to whether the infection had not passed so far before operation that there could be no reasonable hope of relief. If the growth were sufficiently large to be visible it was not improbable that the infection had already gone too far; hence, even though the growth were small and unilateral, it was doubtful if an operation was advisable.

The Chairman said that the general consensus of opinion at the present time seemed to be to always operate in cancer of the larynx if the diagnosis could be made early. In his opinion these cases showed the most brilliant results from operation for cancer that could be found anywhere. Medical art was intended to save life, and it was not a question of whether or not life was worth living after extirpation of the larynx. That question should be decided by the patient after the facts had been explained to him.

The Gleason Operation for Deflected Septum, Illustrated by a Model.

Dr. M. D. Lederman said that the descriptions of the operations by Watson and Gleason were published at about the same time, although in different journals. Dr. Watson made it a point to make a beveled incision through the greatest angle of deflection, in an oblique direction, without passing through the mucous membrane. When there was a vertical deflection, however, it was cut, and if very prominent an elliptical piece was taken out. The next step was to force over the piece, at the same time avoiding perforation of the mucous membrane. Pins are then passed through the outside of the nose and left for from two to six weeks. Gleason cuts below the angle of deflection with a saw, then turns horizontally and carries an incision entirely across, completing it as a U-shaped incision. If the septum is not sufficiently resilient, he dislocates or fractures the other portion. He claims that fully 80 per cent recover with excellent results, although in many cases he uses no splint and does the operation under cocaine. He uses the Harrison Allen tube.

Dr. Bottome asked how long it took to make the incision through the septum. He had found this part very tedious.

Dr. Myles said that he had done the operation about a dozen times, and it had proved exceedingly simple and satisfactory thus far. It had always seemed to him possible that if the incision were carried too high there might be too much interference with the blood supply and that sloughing would result in consequence. A peculiar feature of the operation was that the protrusions of mucous membrane are absorbed in the course of several months. The operation could be easily done in two minutes. He had also done the

Roberts operation, but had found difficulty in making the septum remain in its new and improved position.

Dr. Emil Mayer said that Watson used an incision which was entirely different from the Asch operation. Dr. Asch had always insisted upon making the incision entirely through, and certainly he did not use pins.

Dr. Newcomb referred to a device suggested by Dr. Eskar to avoid perforation of the mucous membrane on the sound side. The mucous membrane on this side is cocainized, and then with a fine syringe some sterilized water is injected directly under the mucosa. This causes a ballooning of the mucosa on the side opposite that on which the operation is to be done, thus making the operation much easier.

True Papilloma of the Nasal Septum.

Dr. Beaman Douglass read a paper on this subject, and illustrated it with some photo-micrographs of both true and false papilloma of the nasal septum. The patient forming the subject of the paper was a woman, fifty-four years of age. The examination showed a warty growth on the mucous membrane on the right side of the nasal septum and behind the tubercle of the septum. It partially filled the inferior meatus. There was no ulceration. The growth was removed with a snare, and the wound healed rapidly. One year had now elapsed and the result was entirely satisfactory. Her general health had been good. Sections of the growth seemed to show an outer epithelial layer and an inner interstitial layer. The former was frequently divided by branches which did not unite. The epithelial layer was composed of squamous epithelium. No glands were found, and the connective tissue was very scanty in proportion to the epithelium. The tumor was therefore a true papilloma, and not like the polyp of Hoppman. The latter is more frequently found on the turbinated bodies where ordinary hypertrophies are found.

Dr. Jonathan Wright said that seven or eight years ago when Hoppman first published his descriptions they caused much confusion, for very few in this country had seen papilloma of the septum. There are some growths, however, that start as simple hypertrophies of the inferior turbinated bodies and after a while assume an epithelial character. It is very difficult to distinguish them microscopically from true papilloma, owing to the shrinking of the epithelium on each side of the fingers. In Zuckerkandl's work would be found a picture of a papilloma of the inferior turbinated bone. It was such a beautiful specimen that it was not mutilated for microscopical examination; if it had been, it would probably have been found to be a localized hypertrophy.

ABSTRACTS AND BIBLIOGRAPHY.

I. NOSE.

To Stop Nose-Bleed—A. C. SMITH—*Buffalo Med. Jour.*, October, 1898.

This simple suggestion is made to arrest an attack of epistaxis: Grasp the nose between the thumb and forefinger and press backwards against the alveolar border of the maxilla and downward against the teeth. This compresses the lateralis nasi and septal arteries. Satisfactory results also follow the use of tannin and acetanilid. LEDERMAN.

The Abuse of the Nasal Douche— LICHTWITZ — *Am. Med. Surg. Bulletin*, October 25, 1898.

In the majority of cases hypersecretion is due to other causes than inflammation of the nasal mucous membrane, as involvement of the sinuses, deviation of the septum, new growths, etc. In such cases the douche does harm by seriously injuring the delicate epithelium. Head-aches are sometimes caused by fluid entering the sinuses, and otitis media produced by solutions finding entrance through the Eustachian tube. LEDERMAN.

Restoration of a Deflected Nasal Septum—B. DOUGLAS—*N. Y. Med. Journ.*, August 6, 1898.

A description of various septal deformities and of the method of incising a deflected septum and restoring it to the median position. A non-perforated splint is preferred to retain the position of the parts. LEDERMAN.

II. MOUTH AND NASO-PHARYNX.

The Internal Secretion of the Tonsils—G. MASSINI—*Gazette Hebd. de Méd. et de Chir.*, August, 1898.

The subcutaneous administration to guinea pigs of the extract of the tonsils of a dog was found to have a noticeable effect in increasing the arterial pressure in a manner somewhat similar to that following the use of the suprarenal extract. Chronically inflamed tonsils were found to have no such effect. The author believes that the function of the tonsil is to furnish an internal secretion, capable of causing increase of arterial pressure.

[Whether Massini's views are correct or otherwise, there is no doubt but that in accordance with the general rule of design in nature, the tonsils have some well defined function in the human body. That these glands are so often removed without any injurious effect being noted, is probably due to the fact that some other organ of the body, perhaps the suprarenal capsule or the spleen, may assume vicariously the normal function of the tonsil.]

SCHEPPEGRELL.

Tuberculosis of the Parotid Gland—PARENT—*Gazette Hebd. de Méd., de Chir.*, September 8, 1898.

Tuberculous tumors of the parotid may be either confluent or disseminated. The bacillus may find its way to the gland either by ascending through Steno's duct or by way of the blood and lymph vessels, the points of entrance being carious teeth, the mucous membrane of the gums and the tonsils.

The clinical course of this affection is very obscure, and the symptoms vague; the etiology shows nothing special, and the diagnosis is difficult, if not sometimes impossible. Histologic and bacteriologic examinations can alone solve the question. The treatment is surgical; the extirpation of the tumor and removal of the glands have given excellent results. SCHEPPEGRELL.

III. ACCESSORY SINUSES.

The Treatment of Sinusitis (with Exception of Maxillary)—MOURE—*Revue Hebd. de Laryngol.*, March, 1898.

Independent of the particular cavity affected, sinusitis presents the following forms:

1. Mucous or muco-purulent discharge without complication.
2. A chronic suppurative form with the formation of fungous neoplasms.
3. A fistulous form with abscess and bony lesions.

In ethmoidal sinusitis the mucous form is generally intermittent, and the treatment is the same as that for the *Schneiderian* membrane in general. In the *latent* and *fungous* forms, the removal of the neoplasm and the free opening of the cells and cleansing washes are usually sufficient. In the osseous fistular form complete ablation of the diseased area is indicated, and sometimes external intervention by way of the orbit is also required.

In frontal sinusitis, the mucous form requires the same treatment as the milder cases of ethmoiditis. Cocainization of the orifice of the naso-frontal canal is usually indicated. In the suppurative and latent forms, in simple cases, the removal of the fungosities and antiseptic washes are sufficient; the more developed cases require catheterization through the natural canal, intranasal opening of the sinus, or treatment by external methods. Catheterization is sometimes easy on account of a patulous canal, but is generally difficult and may be dangerous.

The intranasal opening suggested by Dieffenbach and Schoeffer is recognized as dangerous and is generally condemned. External opening enables us to obtain a rapid and definite cure and avoid other complications. An external opening is made in the canal, anfractuosities carefully curetted and a solution of 1 to 10 per cent of chloride of zinc then applied to the whole cavity. Drainage is then established through the naso-frontal canal and the wound closed. The drainage tube is removed after five or six days. This method of treatment is superior to all others, but it does not always prevent relapses, as reinfection may develop from the ethmoidal or sphenoidal cells, as the various cavities form a kind of labyrinth in which it is very difficult to limit the seat of the lesion.

In the osseous fistular form, the last described treatment is required, but should be more radical in character. In the sphenoidal sinus, we also have the same forms of lesion. The mucous form is frequently mistaken for naso-pharyngeal catarrh. In the more serious cases, opening is required, but the electric drill and trephine are dangerous. The ablation of the middle turbinal, either in part or as a whole, facilitates the operation, which consists of perforating the anterior wall by means of a stillette or curette.

In the combined form of sinusitis, which is not unfrequently met with, a combined method of treatment is required.

SCHEPPEGRELL.

IV. LARYNX AND TRACHEA.

Spasm of the Glottis and Sudden Death in Whooping Cough—CHAUMIER—*Tours*, April, 1898.

Cases of sudden death in whooping cough are rare, the author having been able to collect only fifty cases in literature. In the treatment, in addition to flagellations, friction and artificial respiration, the author advises traction of the tongue. This should be continued for at least ten to forty-five minutes.

[In critical cases, a rapid tracheotomy is to be advised, or preferably intubation, if the necessary instruments are at hand.]

SCHEPPEGRELL.

Edema Laryngis of the Climacteric—UCHERMANN—*Med. Review of Reviews*, October 25, 1898.

This chronic form of edema occurred in a woman who was undergoing the change of life. She was under observation for six months. The edema was strictly unilateral and confined to the left aryepiglottic fold. The disease was invariably worse at the menstrual period, and slowly receded. There was no inflammatory changes, nor was there edema in any other part of the body. The author believes that the case was an instance of Quincke's disease, or acute circumscribed angio-neurotic edema.

LEDERMAN.

Urticaria involving the Larynx and causing Asphyxia—F. Woodbury—*Phil. Polyclinic*, July 2, 1898.

A well-built muscular man of forty-five years quickly developed difficult and hurried breathing, finally becoming purple in the face and falling down in a condition of asphyxia. He revived after an hypodermic injection of strichnia nitrate, followed by morphine and atropine.

The patient had previously suffered from urticaria, and at the time of the attack the characteristic lesions were found, justifying the belief that the swelling of the mucous membrane of the larynx was of this character. LEDERMAN.

V. EAR.

Exostosis of External Auditory Canal—M. A. Goldstein—*Journal of Laryngology*, July, 1898.

The interesting features presented in the reported case were the unusually large size of the growth, the difficulties encountered in the diagnosis and the methods employed for its removal.

The growth completely filled the lumen of the canal, appearing within one-half inch of the meatus; point of fixation of the tumor was traced to the posterior wall of the auditory canal.

Etiology obscure; supposed to have been caused by frequent scratching of a pruritic area in the canal with matches and toothpicks.

The tumor was removed by means of a shallow oval curette placed over the convex surface of the tumor and the application of gentle, firm leverage, resulting in the fracture of the small pedicles by which the mass was attached.

The membrana tympani was intact; the two small pedicles by which the tumor was attached were discernable on the posterior wall of the canal. Canal was restored in a few weeks to normal condition.

The exostosis measured one and a half centimeters in long diameter and one centimeter in the short diameter. After comparison with similar cases, previously reported, where the size of the tumor and the character of the attachment had been indicated, the author finds that this is the largest exostosis thus far observed in the auditory canal, where a distinct pedicle has been found and the bony mass removed in its entirety.

A consideration of the etiology, pathology and classification of exostoses accompanies the article. GOLDSTEIN.

Sudden Deafness, with Report of Case—T. J. HERRON—*Memphis Med. Monthly*, August, 1898.

The patient suffered from an acute otitis media. There was sudden deafness followed by complete aphonia. The neurotic disturbances in this case were marked, but the author believes that the diagnosis of hysteria which had been made was at fault, and that it was a case of meningitis. The case is still under treatment. SCHEPPEGRELL.

Some Things the General Practitioner Should and Should Not Do in the Treatment of the Ear—ADA HOWARD-AUDENRIED, Philadelphia—*Pa. Med. Jour.*, October 7, 1898.

To cleanse the ear the author has found agreeable results from one-half to one per cent solution of formaldehyde. In chronic cases this douche is followed by an insufflation of a powder composed of alum fifteen grains and boric acid one ounce, or acetanilid to replace the alum. The formaldehyde replaces peroxide of hydrogen, except in accumulated secretion and debris.

The author claims that mastoiditis can be absorbed by painting the nostrils with tincture of iodine, applying wet antiseptic dressings (for a week or ten days at times) and maintaining free drainage from the canal. No cases were lost while applying this treatment, though some severe cases were observed.

[The abstractor does not agree with the iodine application, as it produces a dermatitis in a number of cases which interferes with pressure diagnosis. M. D. L.]

Furuncle is treated by applications of pure ichthyol, and douches of hot formaldehyde solution. For eczema of the canal with formation of crusts peroxide of hydrogen is employed, with the yellow oxide of mercury ointment.

Tinnitus may be relieved by freezing the skin over the mastoid by a spray of chloride of ethyl. In all cases of tinnitus attention should be paid to the nose and throat. LEDERMAN.

Cholesteatoma; Cerebral Abscess; Death—THOMAS AND LARTAIL—*Rev. Hebd. de Laryng., Etc.*, February, 1898.

The patient was seventeen years of age and had suffered from the ears since infancy. Eight days before applying, he had suffered from a complicated otitis of the left side; there was fever,

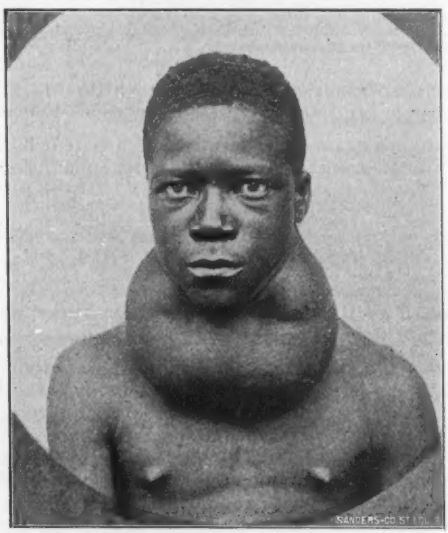
stiffness of the neck, and frontal and left cephalgia, but nothing was referred to the mastoid process. In the upper part of the tympanum a small mass of granulation tissue was seen, which was removed under cocaine. The following day facial paralysis developed and a diagnosis of cerebral abscess was made.

Six days later the central part of the apophysis was opened; two cholesteatomata were removed, one from the aditus and the other from Shrapnell's cavity. The cranial cavity was opened, but the dura mater was found healthy. Eight days later a second operation was performed, and a third eighteen days later, each more extensive but without finding pus. The signs of encephalic compression continued, and the patient died suddenly, probably from a rupture of the abscess into the ventricle. No autopsy.

SCHEPPEGRELL.

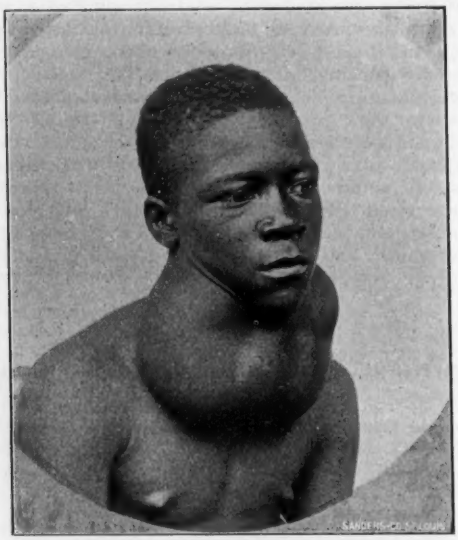
VI. DIPHTHERIA, THYROID GLAND, ŒSOPHAGUS, ETC.

A Remarkable Case of Goitre—J. W. MILLER—*Memphis Medical Monthly*, August, 1898.



A case of highly developed hypertrophy of the thyroid gland in a negro, the voice and respiration being unaffected.

SCHEPPEGRELL.



Prof. Behring's Patent on Diphtheria Antitoxin—B. T. WHITMORE—*N. Y. Med. Journ.*, July 30, 1898.

A remonstrance against the granting of a patent by the United States to Prof. Behring on the process of manufacturing diphtheria antitoxin. SCHEPPEGRELL.

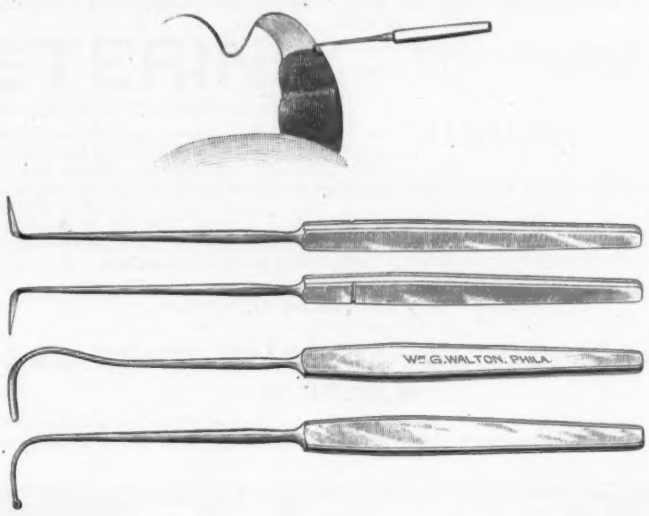
VII. INSTRUMENTS AND THERAPY.

The Treatment of Dysphagia in Laryngeal Tuberculosis—E. S. YONGE—*The Med. Times et Register*, October 8, 1898.

The treatment of this distressing symptom is divided into two parts—that by drugs and that by other methods. He takes a five per cent solution of cocaine as a standard and compares other medication to it. In the presence of ulceration, cocaine, antipyrin, eucaine, orthoform, carbolic acid, guaiacol, ice, morphia (with or without iodoform) and paramonochlorphenol are available. When loss of tissue is absent, cocaine, antipyrin, eucaine, carbolic acid and ice are only of service. Antipyrin acts longer than cocaine, and a combination of the two is an excellent analgesic. Iced solutions of cocaine (five per cent) act as a double strength solution. Complete relief is obtained on a cleansed laryngeal ulcer when orthoform is employed. Paramonochlorphenol in glycerine is as serviceable, but contra-indicated when edema is present. Surgical treatment is also mentioned. LEDERMAN.

Some New Instruments with Indications for their Use—G. H. MAKUEN—*Philadelphia Polyclinic*, July 23, 1898.

A description of four instruments, illustrated below, which the author has found convenient and effective in various pathologic conditions of the tonsils and tonsillar folds. LEDERMAN.



Further Observations on Cimicifuga as a Remedy for Tinnitus Aurium—MENDEL—*Journal des Practiciens*, July 16, 1898.

In patients in which 15 to 20 drops of cimicifuga racemosa had been prescribed for tinnitus aurium, there was benefit in a fair proportion of the cases. When effective, it is very rapid in its action, arresting the tinnitus for the time being in at least two or three days. SCHEPPEGRELL.

Sulpho-Ricinata of Phenol in Tuberculosis of the Larynx—THEODOR HERZOG—*New England Med. Monthly*, October, 1898.

Good results are reported from the use of this remedy in the treatment of ulcers and infiltrations. In three cases in which the vocal cords were the seat of tuberculous infiltration brilliant results were obtained in four weeks. All the pathological changes had disappeared and the voice became clear and loud.

This remedy stimulates the absorption of tubercular infiltration and its products. Surgical and other treatment should be combined. LEDERMAN.

NOTES.

Card from Dr. Wm. H. Daly.

EDITORS LARYNGOSCOPE:—I take this method of thanking the members of the American Laryngological, Rhinological and Otological Society for the handsome presentation sword sent to me by the committee appointed at the recent meeting in Pittsburg, an attention I appreciate and value most highly. Were it possible, I would individually write and thank the respective members who united in sending me so beautiful a souvenir. (Signed) WM. H. DALY.

Errata.

The following corrections should be noticed in the article, "Two New Instruments for Applying Thermal Treatment to the Mucous Membrane of the Nose," by Dr. Emil Amberg, of Chicago, appearing in the June issue of THE LARYNGOSCOPE: "The instrument, Fig. B, has a flat, hollow tube, perforated on *one* side," instead of *upper* side, as it appeared in the text. After this the sentence is to be closed, continuing: "The first instrument (Fig. A), etc., etc."

Tonsillitis.

"To relieve the pain and disagreeable symptoms of tonsillitis and rheumatic pharyngitis kryofine is remarkably efficacious. I do not hesitate to give the drug to children, and find it very beneficial in relieving the nervousness and restlessness accompanying many infantile diseases, in which cases kryofine, in small doses, frequently acts as a hypnotic." (Professor G. F. Butler, Chicago Clinic, March, 1898.)

Dr. Gordon King,

Of New Orleans, has been elected a corresponding member of the French Society of Otology, Laryngology and Rhinology.

Removal.

Dr. F. B. Eaton, Associate Editor of THE LARYNGOSCOPE, has removed from San Jose to 706 Sutter street, San Francisco, Cal.

New Officers.

At the meeting of the Section on Laryngology and Otology of the American Medical Association, held at Denver June 7 to 10, 1898, the following were elected as officers for the ensuing year: Chairman, Dr. Emil Mayer, of New York City; Secretary, Dr. C. R. Holmes, of Cincinnati, Ohio.

True Americanism.

The Antikamnia Chemical Company, of St. Louis, in all of its advertising matter, whether through the journals or by circular, takes particular pains to impress upon physicians and pharmacists that its goods are made in America, by Americans, and for American use. This enterprising company realizes that the words, "made in Germany," or "made in France," no longer possess the influence and meaning they once had. The people of this country no longer scorn or underrate the products of their own native laboratories and workshops.—*The National Druggist.*

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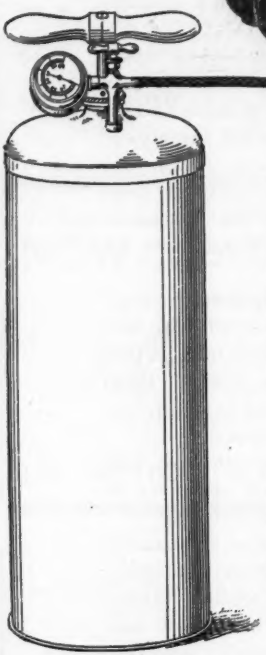

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THE THERAPEUTIC VALUE OF PROPRIETARY MEDICINES.

Only a few years have elapsed since the endorsement given by physicians of proprietary specialties and pharmaceutical products was looked upon as an unethical procedure and met with a general disapproval. To-day the honest expression of opinion as to the merit of a proprietary preparation which has been subjected to a thorough test, is given due consideration and the extensive prescribing and continued use of many of these specialties by a host of thoroughly ethical practitioners is the best proof of their therapeutic value. As Otology and Laryngology are but the results of the onward march of the science of medicine, so to the pharmaceutical chemist, who concentrates his skill and attention on the production of but a few specialties, is the outcome of elegant pharmacy. In this era of specialization the proprietary product manufactured on strictly scientific and chemical principles is as much a specialty in pharmacy as the practice of otology and laryngology is a specialty in medical and surgical science. And, we are bold enough to add that the therapeutic results are proportionately as great when considered in their relations to general pharmacy, as is the success attending the practice of the specialist in medicine and surgery.

How many of you find yourselves prescribing Antikamnia in your daily practice, almost as frequently as you write any of the most familiar antipyretics and analgysics recognized by the Pharmacopeia? For a preparation which has found such universal favor, no further commentary is necessary.

When the laryngologist desires to prescribe a palatable gargle for some of his fastidious lady patients, one which is effective and yet will not set the mouth awry, he bethinks himself of such preparations as Listerine, Borolyptol, Bensolyptus or other of these pleasant pharmaceutical preparations which are as serviceable for their antiseptic purpose as they are agreeable to the taste.

The day for the bitter pill and for the offensive-looking fluid mixture is no more; this is as much an age of elegant pharmacy as it is the era of the laryngologist or of the abdominal surgeon.

Pharmacy, like medicine, recognizes the progressive spirit of the age, and even many of our old and experienced metropolitan druggists acknowledge that the numerous elixirs and cordials, syrups and emulsions, pills and tablets can be more satisfactorily and beautifully compounded by the pharmaceutical specialist who has at his command extensive laboratories, steam triturating machines, vast stills, dessicators and sterilizers.

The introduction of steam and electricity have revolutionized pharmacy, as well as mechanics, and the physician who still cries out against the elegant legitimate pharmaceutical product, whether it be proprietary or not, is as backward as his confrere who still condemns the antitoxine treatment in diphtheria or the value of asepsis or anti-sepsis in surgery.

THE THERAPEUTIC VALUE OF PROPRIETARY MEDICINES—*Continued.*

In the minds of many the word *proprietary*, as applied to pharmaceutical products, seems to carry with it the idea of quackery and the vague feeling as if the influence of such a product were deleterious to the interests of the profession. Proprietary simply indicates ownership of a preparation, and the composition or ingredients of a proprietary product are submitted to the profession freely and openly. The honest endeavor of the proprietary pharmacist is frequently expressed on the label of each bottle or container by submitting the ingredients and even detailing the quantities of each used.

The use of some of our best proprietary preparations, selected with professional judgment, will not reflect to the discredit of any practitioner. When such illustrious authorities as Prof. Eichhorst, Director of the Medical Clinic of the University of Zurich, gives his initial endorsement of kryofine; when Prof. Schmiedeberg, Professor of Pharmacy in the University of Strassburg, produces ferratin in his own laboratory, and when a host of distinguished medical authorities in America and Europe take occasion to endorse some of the legitimate pharmaceutical products classed under the name of proprietary medicines, we need not fear to tread where such men lead the way.

Among the old standard combinations of the Pharmacopeia, one which has grown gray in the service as an alterative and glandular stimulant, is Donovan's solution (hydrarg. et arsenii iodi). When attention was first directed to arsenauro and mercauro, as substitutes for Donovan's solution, and the claims advanced that they were better tolerated in the digestive tract, were definite chemical products and more effective in results, we did not hesitate to substitute the elegant pharmacy of to-day for the simple pharmacy of the last decade.

As otologists, we are constantly on the alert for an antiseptic in powder form, available as a dressing in suppurative and inflammatory conditions of the middle ear, more potent than boracic acid, less disagreeable and less irritating when in constant contact with these delicate tissues than iodoform, exhibiting no tendency to cake and clog in the auditory canal and offering but a minimum of toxic absorption.

If hydrozone is a superior and concentrated product of peroxide of hydrogen, offered to the profession by an experienced chemist as the result of many years of labor, why should the ethical practitioner hesitate to use such an agency for the benefit of his patients any more than he would bring into requisition Dr. Smith's nasal saw or Dr. Jones's laryngeal applicator. Because a pharmaceutical preparation bears the stamp "proprietary" it should not necessarily be barred out from consideration in ethical therapy.

BOOK DIRECTORY.

THE THERAPEUTIC VALUE OF PROPRIETARY MEDICINES—*Continued.*

As long as a proprietary product in medicine is brought exclusively to the attention of the profession, and as long as the maker of these products recognizes and respects the ethical principles governing the practice of medicine, and represents his product honestly and openly, he is entitled to a fair and unbiased judgment from the profession.

NASAL CATARRH.

Dr. T. Pickles, Anna, Ill., writes to the editor of *The Medical Summary* the following therapeutic results from actual experience:

For sore nose, nasal catarrh, etc., I have used Unguentine for the past three years, and have yet to see the case, where I have used it, that was not cured within a reasonable length of time.

In cases where dry scabs or scales form in the nose, I order to give, say a half ounce of Unguentine, make a small mop with a small roll of absorbent cotton on the end of a small stick, roll the mop in the Unguentine and apply well up both nostrils, at the same time have patient to snuff the nose until the Unguentine can be plainly tasted. Use only once a day, just before retiring for the night. This generally cures within three weeks.

IN LARYNGEAL OR WINTER COUGHS.

Dr. Walter M. Fleming *(Journal of Nervous and Mental Disease)* says, that in acute attacks of laryngeal or winter cough, tickling and irritability of larynx, Antikamnia and Codeine Tablets are exceedingly trustworthy. If the irritation or spasm prevails at night the patient should take a five-grain tablet, containing 4¾ gr. Antikamnia and ¼ gr. Sulphate Codeine, an hour before retiring and repeat it hourly until the irritation is allayed. Allow the tablet to dissolve slowly in the mouth, swallowing the saliva. After taking the second or third tablet the cough is usually under control, at least for that paroxysm and for the night. Should the irritation prevail in the morning or midday, the same course of administration should be observed until subdued. In neuralgia, in short, for the multitude of nervous ailments, he doubts if there is another remedial agent so reliable, serviceable and satisfactory, and this, without establishing an exaction, requirement, or habit in the system, as morphine does.—*The New York Medical Journal.*

REMOVALS.

Dr. Mary E. Dickinson, to Rochester, N. Y.
Dr. Robert Barclay, to 3894 Washington ave., St. Louis, Mo.
Dr. Frank E. Artaud, to Lake Providence, La.
Dr. E. Justin Hay, to Creston, O.
Dr. F. T. Reyling, to 39 Third st., Hoboken, N. J.
Dr. Joseph Muir, to 31 W. Thirty-sixth st., New York.
Dr. J. F. Burkholder, to 306 Reliance Building, Chicago, Ill.

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Contains the Essential Elements of the Animal Organization—Potash and Lime;

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And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a **Slightly Alkaline Reaction.**

It Differs in its Effects from all Analogous Preparations; and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, ***finds that no two of them are identical,*** and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, ***in the property of retaining the strychnine in solution,*** and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. ***Fellows.***"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to:

Mr. FELLOWS, 48 Vesey Street, New York.